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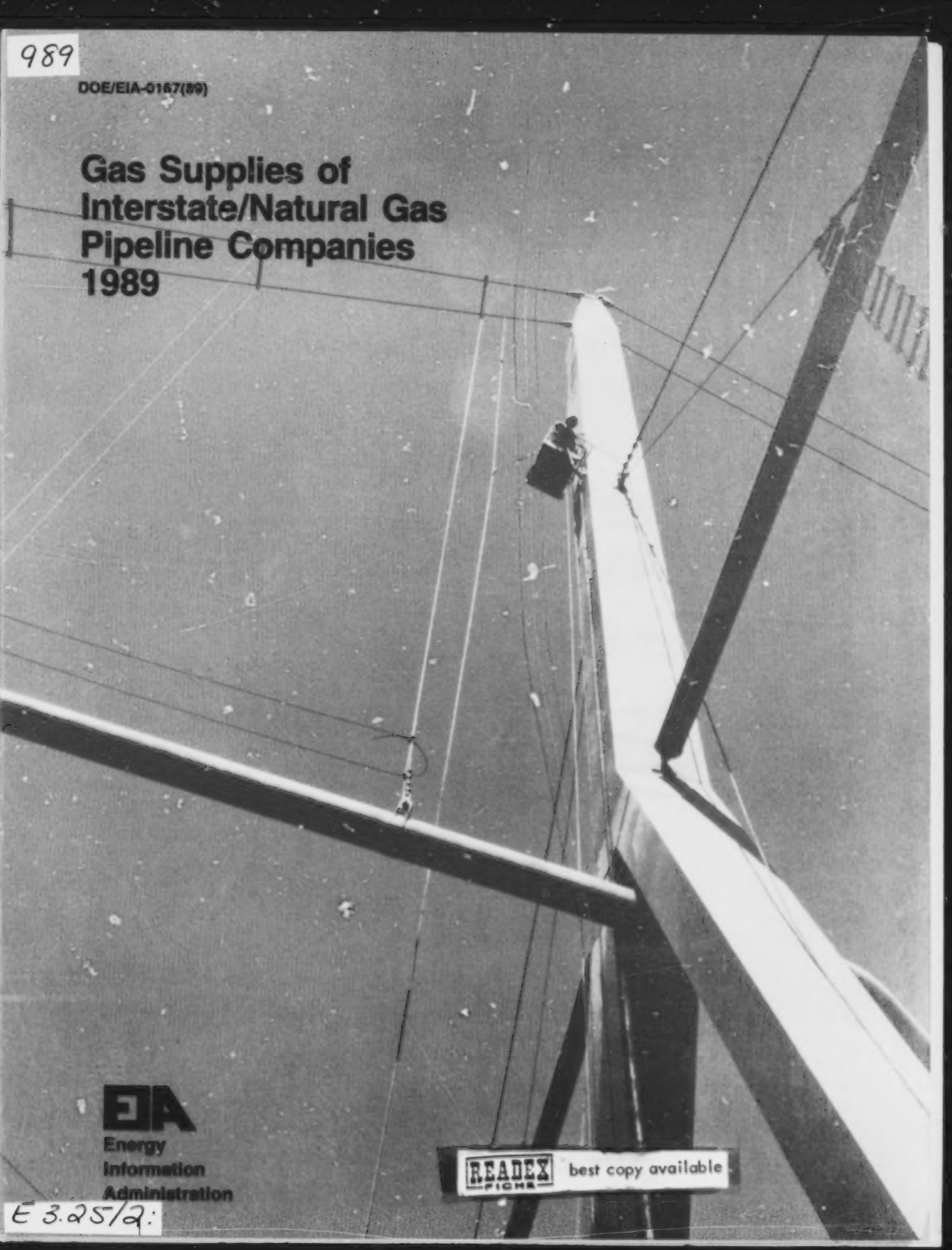
Gas Supplies of Interstate/Natural Gas Pipeline Companies 1989



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A steel tower supporting an 18-inch gas pipeline at overwater river crossing.

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Gas Supplies of Interstate Natural Gas Pipeline Companies 1989

Energy Information Administration
Office of Oil and Gas
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Washington, D.C. 20585

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Introduction

Gas Supplies of Interstate Natural Gas Pipeline Companies 1989 was prepared by the Reserves and Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA). The publication provides information on the total reserves, production, and deliverability capabilities of the 74 interstate pipeline companies[1] required to file the Federal Energy Regulatory Commission (FERC) Form 15, "Interstate Pipeline's Annual Report of Gas Supply." This publication is the 27th in a series of annual reports on the total gas supplies of interstate pipeline companies since the inception of individual company reports to the Federal Power Commission (FPC) in 1964 for report year 1963.

This publication provides information on the interstate pipeline companies' supply of natural gas during calendar year 1989, for use by the FERC for regulatory purposes. It also provides information to other Government agencies, the natural gas industry, as well as policy makers, analysts, and consumers interested in current levels of interstate supplies of natural gas and trends over recent years.

The gas supplies of interstate pipeline companies consist of the certificated, dedicated, recoverable, salable natural gas available from domestic in-the-ground reserves; gas purchased under contracts with other interstate pipeline companies; domestically produced coal gas, liquefied natural gas (LNG), and synthetic natural gas (SNG); and imported natural gas and LNG. The domestic in-the-ground reserves consist of company-owned reserves including natural gas in underground storage, reserves dedicated to or warranted under contracts with independent producers, and supplemental or short-term supplies purchased from independent producers and intrastate pipeline companies. To avoid duplicate reporting of domestic in-the-ground reserves, the volumes of gas under contract agreement between jurisdictional pipelines have been excluded in summarizing State and national reserves. Volumes contracted under agreements with foreign suppliers include Canada and Mexico.

On October 1, 1977, pursuant to provisions of the Department of Energy Organization Act, Public Law 95-91, 91 stat. 565 (August 4, 1977), and Executive Order No. 12009, 42 Fed. Reg. 46267 (September 15, 1977), the FPC ceased to exist, and its functions and regulatory responsibilities were transferred to the FERC, an independent commission within the Department of Energy (DOE). The EIA within DOE is responsible for collecting, compiling, and disseminating the gas supply information reported by the jurisdictional interstate pipeline companies on Form 15. A summary of the methods used for collecting, analyzing, and preparing the data is provided in Appendix A.

All volumes of natural gas in this publication are reported on a dry basis at 14.73 pounds per square inch absolute and 60 degrees Fahrenheit. A glossary of terms used in this report has been provided to assist users in understanding the data presented in the publication. Additional natural gas information sources are listed in Appendix D.

[1]Appendix B lists all interstate pipeline companies that were required to file 1989 gas supply information with the Federal Energy Regulatory Commission.

Overview

Domestic Natural Gas Reserves

Total dedicated domestic gas reserves, owned by or under contract to the interstate pipeline companies, decreased in 1989 by 11.1 trillion cubic feet, or 22.8 percent, from 48.8 trillion cubic feet at the beginning of the year to 37.7 trillion cubic feet at the end of the year (Table 1). The reader should be aware that the decrease in reserves, reported by Form 15 respondents, does not necessarily indicate a decrease in the level of proved natural gas reserves for the United States as a whole.

The 22.8 percent drop in dedicated reserves reflects a trend by some interstate pipeline companies to become transporters of natural gas. This reflects a basic shift in the structure of the natural gas industry. In past years, gas was traditionally sold by the producer to the pipeline company that sold it to a local distribution company which in turn delivered it to the ultimate consumer. Currently, the trend is increasingly for gas to be sold by the producer directly to the consumer (or to a local distribution company), resulting in less gas being dedicated to the interstate market. Pipeline companies in these cases provide transportation services only. Additionally, many of the respondents are not entering into long term contracts, and some older higher priced reserves are being released in favor of cheaper new reserves.

A 5-year tabulation shows that dedicated domestic gas reserves, reported on Form 15, decreased from 89.9 trillion cubic feet at the beginning of 1985 to 37.7 trillion cubic feet at the end of 1989, a decrease of 52.2 trillion cubic feet, or 58.1 percent (Table 2). The reported peak reserves of 198.1 trillion cubic feet occurred at year-end 1967 (Table 3). It should be noted, however, that reserves reported for 1981 and subsequent years include company-owned reserves in underground storage. Prior to report year 1981, underground storage reserves were not uniformly reported.

The EIA collects total proved domestic reserve information on Form EIA-23, "Annual Report of Domestic Oil and Gas Reserves," and publishes its findings annually in *U. S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, DOE/EIA-0216. Natural gas reserves in the Lower 48 States declined by 0.5 percent to 158.2 trillion cubic feet. Total U.S. reserves declined to 167.1 trillion cubic feet.

Annual Production

Total gas purchased and produced from dedicated domestic gas reserves in 1989 was 4.8 trillion cubic feet, down 17.2 percent from the 5.8 trillion cubic feet reported in the preceding year. A peak production level of 14.2 trillion cubic feet occurred in 1971 and 1972 (Table 3).

Reserves/Production (R/P) Ratio

The 1989 ratio of total dedicated domestic reserves to production was 7.8, slightly below the 8.4 ratio reported for 1988 (Figure 1). The R/P ratio declined steadily throughout the first 10 years of Form 15 reports. Since 1972, the decline has been less pronounced. The R/P ratio dropped to a low of 8.2 in 1981, and then increased to 10.6 in 1986 due to the decrease in production during 1986.

Net Revisions

Net revisions to dedicated domestic gas reserves during 1989 were -10.1 trillion cubic feet, as compared to -12.8 trillion cubic feet in 1988 (Tables 1 and 2). Revisions are attributed to production adjustments, changes in dedicated interests, and revisions to in-the-ground domestic reserve estimates of previous years made during the current report year. Revisions to purchases from interstate pipeline companies that are survey respon-

dents, revisions to import contracts, or revisions to purchases of coal gas, LNG, or SNG are not included.

Reserve Additions

Total interstate reserve additions during 1989 were 3.9 trillion cubic feet, compared to additions of 2.2 trillion cubic feet in 1988 (Tables 1 and 2). The increase in reserve additions for 1988-89 reverses a trend of decreases since 1985. Much of the increase in reserve additions is attributed to technological advances in infill drilling, workovers, and recovery enhancements.

Reserve additions consist of new, proved, dedicated domestic reserves credited to new fields, new reservoirs, new gas purchase contracts, amendments to old gas purchase contracts, or purchase of in-place gas reserves that occurred during the report year and had not been previously reported. Reserve additions refer to domestic in-the-ground natural gas reserve additions and do not refer to interstate pipeline purchase agreements, contracts with foreign suppliers, or coal gas, LNG, or SNG purchase arrangements.

Of the 3.9 trillion cubic feet of reserve additions reported during the report year, 2.9 trillion cubic feet are attributed to new gas purchase contracts with independent producers (Table 5).

Gross Change in Reserves

The gross change in dedicated domestic reserves is calculated at -6.3 trillion cubic feet for 1989 (Table 1). This quantity is defined as year-end 1989 reserves plus 1989 production minus year-end 1988 reserves.

Gross Change/Production (GC/P) Ratio

The ratio of gross change in reserves (revisions and additions) to production for 1989 was -1.3. The comparable ratio for 1988 was -1.8. A ratio less than 1 indicates a decrease in year-end reserves from the preceding year.

Imports

Total natural gas imported by interstate pipeline companies from Canada was 0.8 trillion cubic feet, 13.5 percent of the total gas produced and purchased in 1989. Volume of Canadian and Mexican natural gas remaining under contract is 13.9 trillion cubic feet. (Figure 2 and Table 4).

Projected Deliverability

Total contract deliveries are projected to decline from 6.8 trillion cubic feet in 1990 to 3.4 trillion cubic feet by 1994 (Table 4). This decline is driven by the projected decline in dedicated domestic reserve deliverability. Deliveries from foreign and other sources are expected to decline, but at a slower rate over the 5-year period.

Table 1. Summary of Domestic Natural Gas Reserves of the Interstate Natural Gas Pipeline Companies
(Million Cubic Feet)

Item	Company-Owned and Long-Term Gas Purchase Contracts	Other Gas Supply[a]	Total Dedicated Domestic Gas Reserves
(a) Total dedicated gas reserves as of December 31, 1988	48,253,965	[b] 537,594	48,791,559
(b) Net revisions to reserve estimates during 1989[c]	NA	NA	-10,142,095
(c) Reserves added during 1989	NA	NA	3,879,249
(d) Total net revisions and additions[c] (e) minus (a)	-6,777,851	515,005	-6,262,846
(e) Gas reserves as of December 31, 1989 and changes during 1989 (f) plus (g)	41,476,114	1,052,599	42,528,713
(f) Gas purchased and produced during 1989	4,358,158	485,174	4,843,332
(g) Total dedicated gas reserves as of December 31, 1989	37,117,956	567,425	37,685,381

[a] Includes emergency purchases, short-term contracts, and intrastate purchases. Purchases between interstate pipelines, and purchases from foreign suppliers are excluded.
[b] Represents contractual volumes.
[c] Includes underground storage reserves.
NA = Not Available.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 2. Annual Changes in Interstate Gas Reserves
(Billion Cubic Feet)

Item	1985	1986	1987	1988	1989
Beginning of Year Reserves	89,893	85,102	80,602	65,135	48,792
New Reserve Additions	5,089	2,489	1,934	2,213	3,879
Net Revisions[a]	-963	589	-10,745	-12,752	-10,142
Total Additions and Revisions[a]	4,126	3,078	-8,811	-10,539	-6,263
Annual Production	8,918	7,578	6,655	5,804	4,843
Year-End Reserves	85,102	80,602	65,135	48,792	37,685
Upward (Downward) Revisions Percent of Additions	-18.9	23.7	-555.6	-576.2	-261.5

[a] Calculated; includes underground storage reserves.
[b] "Year-End Reserves" plus "Annual Production" less "Beginning of Year Reserves."
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

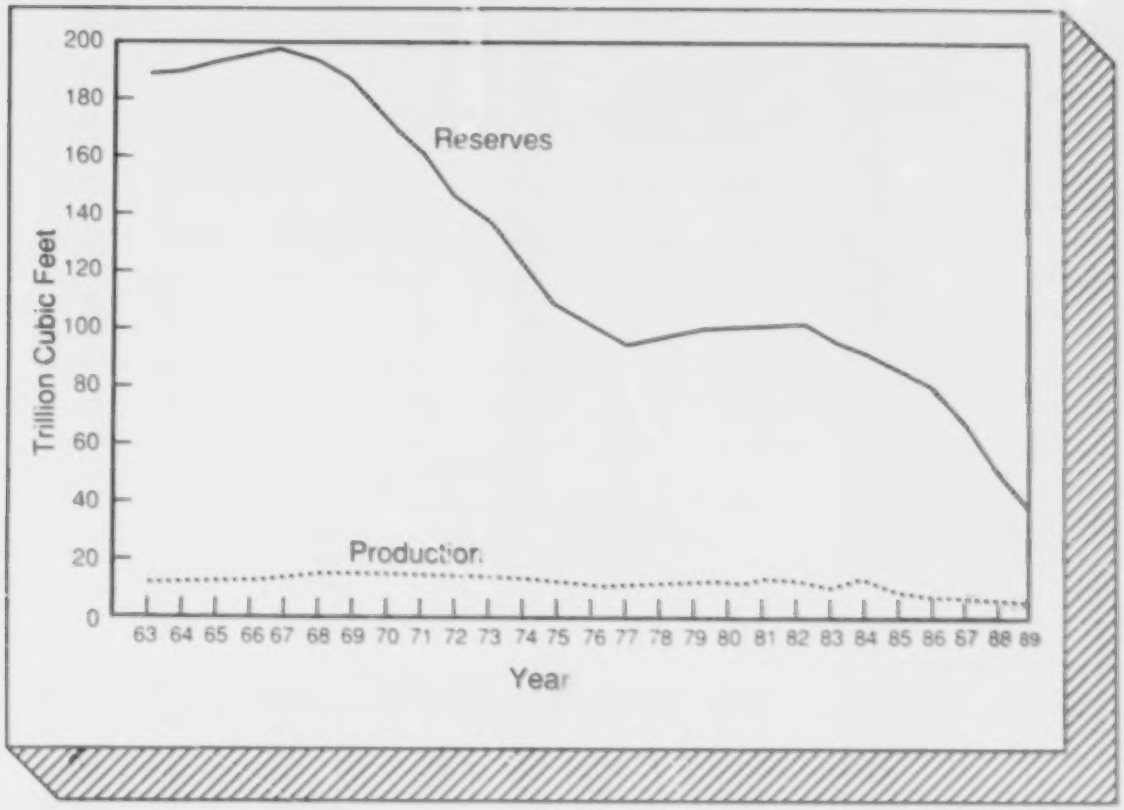
Table 3. Total Interstate Gas Supply, Domestic Gas Reserves, Import Contracts, and Other Supply

(Trillion Cubic Feet)

Date	Domestic Reserves				Import contracts		Other[b]	Total Gas Supply	Number of Companies
	Short-Term and Emergency Purchases[a]	Long-Term Independent Producer Contracts	Company Owned	Total	Pipeline	LNG			
				Gas Supply at Year-End					
1963	—	165.1	23.4	188.5	9.7	—	—	198.2	65
1964	—	166.3	22.9	189.2	11.0	—	—	200.2	67
1965	—	169.1	23.0	192.1	10.8	—	—	202.9	66
1966	—	172.9	22.2	195.1	9.9	—	—	205.0	69
1967	—	175.9	22.2	198.1	10.6	—	—	208.7	67
1968	—	173.3	21.7	195.0	12.5	—	—	207.5	67
1969	—	169.0	18.6	187.6	11.9	—	—	199.5	68
1970	—	156.4	17.2	173.6	17.2	—	—	190.8	68
1971	0.07	144.8	16.5	161.4	16.6	—	—	178.0	62
1972	.32	131.2	15.4	146.9	15.7	5.7	—	168.3	67
1973	.21	120.9	13.2	134.3	14.8	8.7	—	157.8	67
1974	.06	108.6	11.8	120.5	13.5	9.1	—	143.1	65
1975	.01	95.6	11.2	106.8	12.6	9.4	—	128.8	65
1976	.03	87.5	10.8	98.3	11.5	9.4	—	119.2	62
1977	.01	82.6	10.3	92.9	10.7	12.6	—	116.2	61
1978	[c] (*)	83.7	10.3	94.0	10.1	12.4	—	116.5	61
1979	.02	84.7	12.6	97.3	10.4	12.0	—	119.6	63
1980	.37	84.5	12.3	97.1	11.3	8.3	—	116.7	63
1981	1.02	83.6	13.7	98.3	12.3	7.6	0.34	118.6	73
1982	.66	84.4	13.7	98.7	11.0	3.3	.61	113.6	71
1983	.55	83.3	10.6	94.5	9.5	3.2	.55	107.7	71
1984	.48	79.9	9.5	89.9	10.7	3.2	.85	104.6	74
1985	.43	75.4	9.3	85.1	10.7	3.2	.57	99.6	76
1986	.65	73.4	6.6	80.6	11.4	3.2	.84	96.0	77
1987	.63	58.3	6.2	65.1	10.2	—	.87	76.2	72
1988	.54	42.2	6.1	48.8	10.0	—	.75	59.6	68
1989	.57	32.2	4.9	37.7	13.9	—	.86	52.5	74
				Annual Production					
1963	—	8.5	.9	3.4	.4	—	—	9.8	65
1964	—	9.1	.9	10.0	.4	—	—	10.4	67
1965	—	9.4	1.0	10.4	.4	—	—	10.8	66
1966	—	10.1	1.0	11.1	.4	—	—	11.5	69
1967	—	10.8	1.0	11.8	.5	—	—	12.3	67
1968	—	11.6	1.0	12.6	.6	—	—	13.2	67
1969	—	12.4	1.0	13.4	.7	—	—	14.1	68
1970	—	13.1	1.0	14.1	.8	—	—	14.9	68
1971	.18	13.1	.9	14.2	.9	—	—	15.1	62
1972	.27	12.9	1.0	14.2	1.0	—	—	15.2	67
1973	.29	12.6	.8	13.7	1.0	—	—	14.7	67
1974	.23	12.0	.8	13.0	.9	—	—	13.9	65
1975	.11	11.2	.7	12.0	.9	—	—	12.9	65
1976	.08	10.7	.7	11.4	.9	—	—	12.3	62
1977	.16	10.0	.9	10.9	1.0	.1	—	12.1	61
1978	.10	10.3	.6	11.0	.8	.6	—	12.4	61
1979	.05	10.8	.7	11.6	1.0	.2	—	12.7	63
1980	.03	10.9	.7	11.6	.9	.1	—	12.6	63
1981	.40	10.9	.6	12.0	.8	[d] (*)	.02	12.8	73
1982	.13	10.2	.6	10.9	.9	[d] (*)	.02	11.8	71
1983	.10	9.0	.4	9.5	.8	.1	.01	10.4	71
1984	.17	9.9	.4	10.4	.8	[d] (*)	.01	11.2	74
1985	.23	8.4	.3	8.9	.9	[d] (*)	.05	9.9	76
1986	.25	7.1	.2	7.6	.7	—	.09	8.3	77
1987	.45	6.0	.2	6.7	.8	—	.10	7.5	72
1988	.45	5.2	.2	5.8	.9	—	.20	6.9	68
1989	.49	4.2	.2	4.8	.8	—	.24	5.9	74

[a] Includes intrastate pipeline purchases.
[b] Includes COG, LNG, SNG, and other supply.
[c] Less than 0.005 trillion cubic feet.
[d] Less than 0.05 trillion cubic feet.

Figure 1. Natural Gas Reserves and Production
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

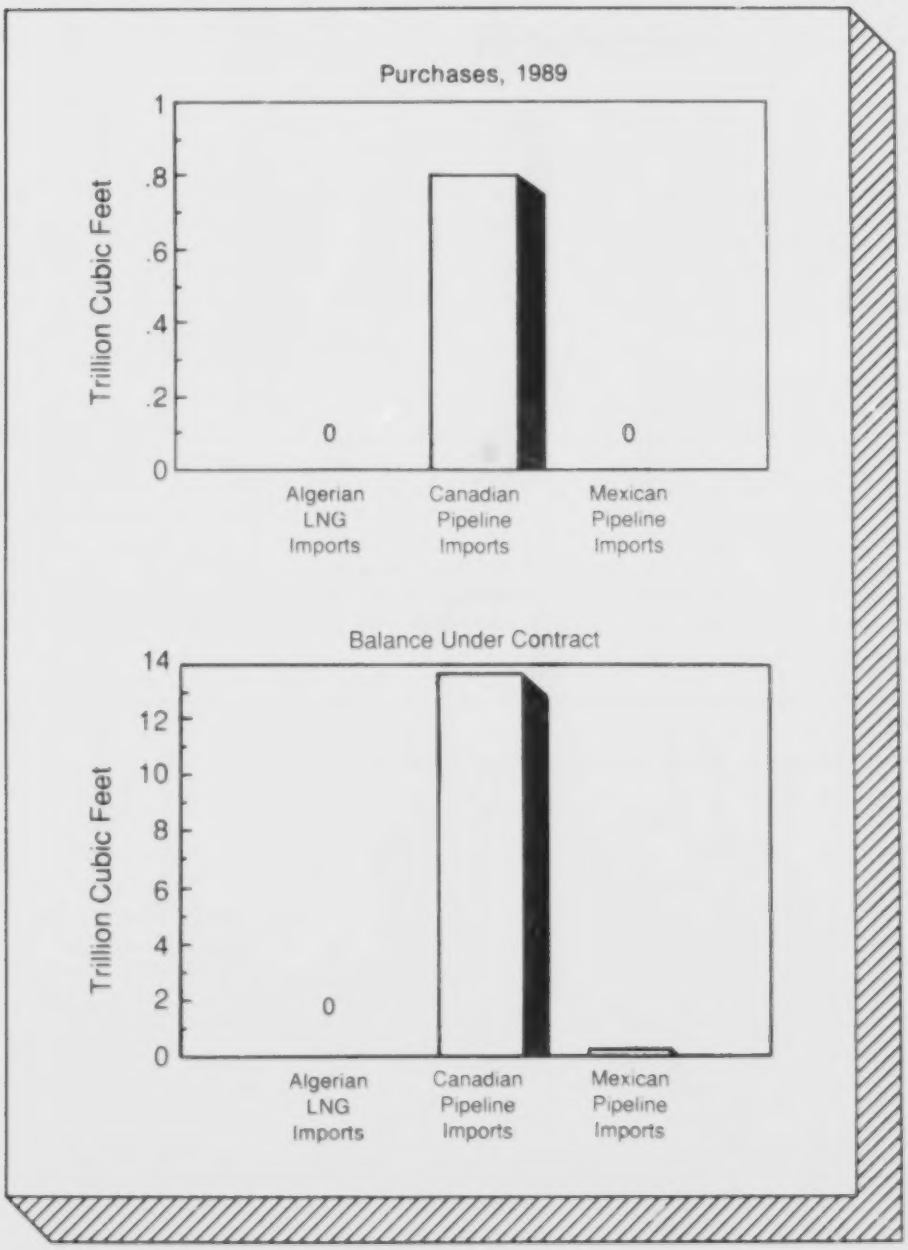
Table 4. Gas Supply and Deliverability Summary: Volumes Dedicated to Interstate Pipeline Companies as of Year-End 1989

(Million Cubic Feet)

	Gas Supply 12-31-89	Produced and/or Purchased	Projected Deliverability				
			1990	1991	1992	1993	1994
Domestic Gas Supply							
Company-Owned and Long-Term	37,117,956	4,358,158	5,322,105	4,343,909	3,616,418	2,975,681	2,427,742
Short-Term and Emergency Purchases[a]	567,425	485,174	221,764	29,313	27,408	24,547	18,043
Total Domestic	37,685,381	4,843,332	5,543,869	4,373,222	3,643,826	3,000,228	2,445,785
Domestic as Percent of Total	71.8	82.5	81.9	79.7	77.8	74.5	71.4
Pipeline Imports							
Mexican Gas	287,547	0	0	0	0	40,880	40,880
Canadian Gas	13,649,514	789,622	1,133,076	1,047,571	975,241	927,628	885,827
Total Pipeline Imports	13,937,061	789,622	1,133,076	1,047,571	975,241	968,508	926,707
Pipeline Imports as Percent of Total	26.6	13.5	16.7	19.1	20.8	24.0	27.1
LNG Imports							
Algerian LNG	0	0	0	0	0	0	0
LNG Imports as Percent of Total	0	0	0	0	0	0	0
Other[b]	863,536	236,622	90,921	67,915	66,399	58,637	52,948
Other as Percent of Total	1.6	4.0	1.3	1.2	1.4	1.5	1.5
Total All Sources	52,485,978	5,869,576	6,767,866	5,488,708	4,685,466	4,027,373	3,425,440

[a] Includes intrastate pipeline purchases.
[b] Includes coal gasification, liquefied natural gas, synthetic natural gas, and other supply.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 2. Imports
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 5. New Reserve Additions Reported for the First Time in 1989
(Million Cubic Feet)

Company Name	Producer-Contracted Additions	Total Additions
ANR Pipeline Co	21,640	53,143
Arkansas Oklahoma Gas Corp	0	9,928
Arkla Inc	0	88,602
Carnegie Natural Gas Co	11,364	11,364
CNG Transmission Corp[1]	39,876	43,060
Colorado Interstate Gas Co	20	15,916
Columbia Gas Transmission Corp	218,291	218,291
El Paso Natural Gas Co	508	508
Florida Gas Transmission Co	0	44,960
K N Energy Inc	0	45,376
Kentucky West Va Gas Co	7,066	7,066
Mid Louisiana Gas Co	11	5,631
MIGC Inc	0	262
Mississippi River Transmission Corp	822,339	833,317
Natural Gas Pipeline Co of America	265,140	327,568
Northern Natural Div InterNorth Inc	37,751	296,346
Questar Pipeline Company[2]	0	275
Southern Natural Gas Co	244,290	268,657
Tennessee Gas Pipeline Div Tenneco	38,199	185,852
Texas Eastern Transmission Corp	1,061,144	1,061,144
Texas Gas Pipeline Corp	13,467	13,467
Texas Gas Transmission Corp	0	40,065
Transcontinental Gas Pipe Line Corp	118,570	195,428
Transwestern Pipeline Co	0	65,019
Trunkline Gas Co	0	9,039
United Gas Pipe Line Co	0	817
Valero Interstate Transmission Co	0	155
Williams Natural Gas Co	15,720	17,779
Williston Basin Interstate Pipeline	0	36
Total All Companies	2,928,196	3,871,871

[1] Formerly Consolidated Gas Transmission Corp.
[2] Formerly Mountain Fuel Resources Inc.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Distribution of Domestic Natural Gas Reserves and Production

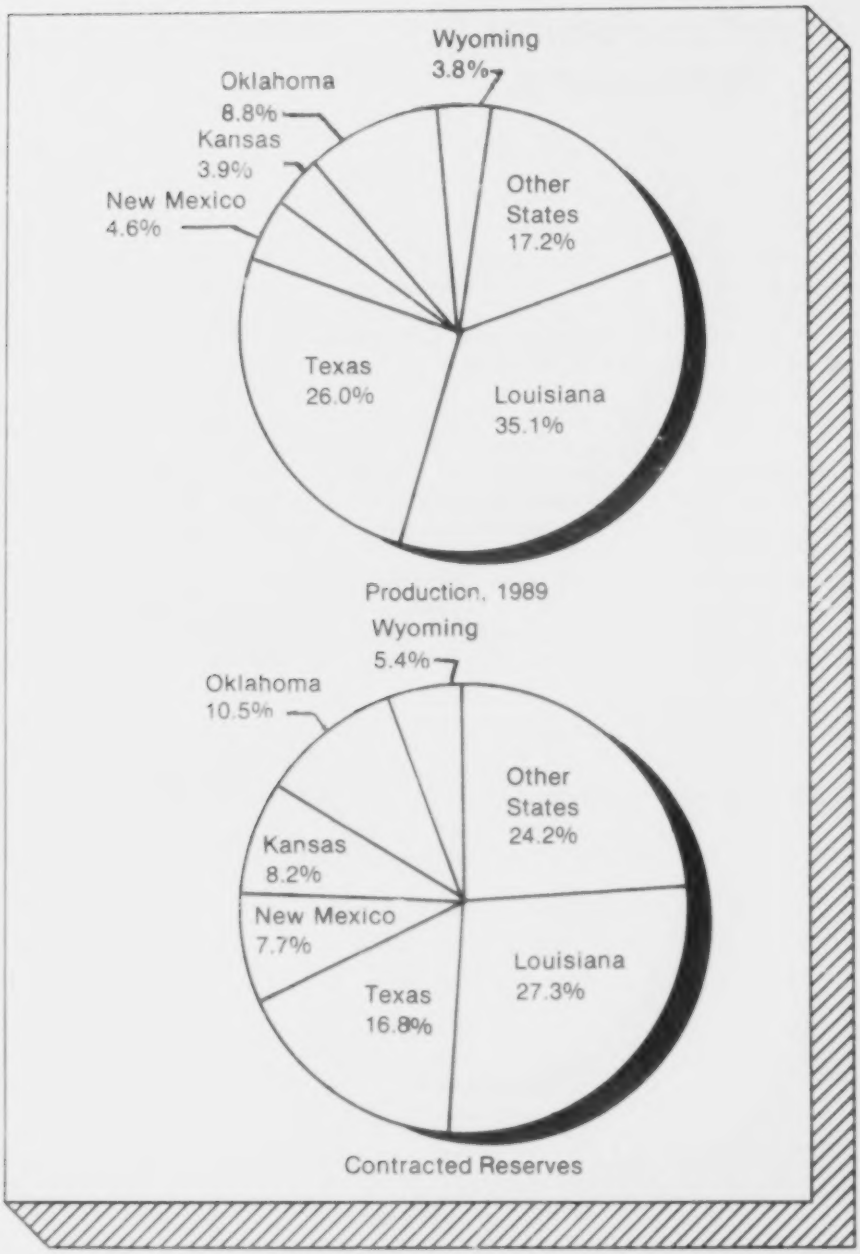
The volume of domestic natural gas reserves owned by or dedicated to the interstate pipeline companies at year-end 1989 totaled 37.7 trillion cubic feet, including 36.2 trillion cubic feet of reserves located in 30 States and 1.4 trillion cubic feet of gas in underground storage but undesignated by State (Tables 6, 7, and 8). Production reported in 31 States totaled 4.8 trillion cubic feet.

Louisiana, New Mexico, and Texas collectively accounted for 51.8 percent of the domestic in-the-ground reserves and 65.6 percent of the production reported in 1989 (Figure 3). Although the Form 15 no longer requires respondents to report natural gas reserves by FERC gas area, the traditional subdivisions of Louisiana, New Mexico, and Texas have been retained for historical continuity. The reserves for these States are presented by State subdivision in Tables 6, 7, and 8, according to the county in which the reserves were reported to exist. Appendix C provides a ready reference that the reader can utilize to relate counties within these States to the State subdivisions appearing in Tables 6, 7, and 8.

In Tables 6 and 7, reserves are shown as **Nonassociated** and **Other**, as reported. **Nonassociated** refers to natural gas in reservoirs that do not contain significant quantities of crude oil. Reserves not explicitly reported as **Nonassociated** on the Form 15 are classified as **Other**.

The reader concerned about historical trends in reserves and production by State and by producing area within the States of Louisiana, New Mexico, and Texas will find this information in Table 8.

Figure 3. Distribution of Reserves and Production by State



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 6. Summary of Dedicated Gas Production and Reserves by Type of Gas by State

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Alabama	217,364	212,780	4,584	34,420
Arizona	93	93	0	13
Arkansas	1,856,292	1,846,805	9,487	166,752
California	229,942	0	229,942	24,509
Colorado	488,593	362,369	126,224	42,671
Florida	9,257	0	9,257	1,477
Illinois	2,875	2,397	478	1,117
Indiana	0	0	0	1
Kansas	3,090,449	3,075,967	14,482	187,778
Kentucky	597,443	597,443	0	40,689
Louisiana	10,285,317	8,955,434	1,329,883	1,697,644
Northern Louisiana	1,099,590	998,313	101,277	124,525
Southern Louisiana Onshore	1,831,260	1,699,061	132,199	242,197
Southern Louisiana Warranty[a]	0	0	0	128,889
Total Louisiana Offshore	7,354,467	6,258,060	1,096,407	1,202,033
Maryland	41,830	41,830	0	83,776
Massachusetts	0	0	0	18,255
Michigan	114,111	114,111	0	15,996
Mississippi	320,137	312,156	7,981	110,737
Missouri	13,258	13,258	0	9,583
Montana	439,489	271,011	168,478	22,078
Nebraska	87,641	87,641	0	320
New Mexico	2,698,465	2,520,094	378,371	221,865
San Juan Basin	2,086,583	1,995,149	91,434	95,165
New Mexico Permian Basin	811,882	524,945	286,937	126,700
New York	143,112	143,112	0	34,746
North Dakota	35,207	0	35,207	12,462
Ohio	235,719	209,903	25,816	11,933
Oklahoma	3,950,362	3,721,016	229,346	460,564
Pennsylvania	778,794	677,643	101,151	42,584
South Dakota	2,293	0	2,293	549
Tennessee	14,091	0	14,091	2,214
Texas	6,325,361	5,789,540	535,821	1,257,507
Texas Railroad District No. 1 (North)	1,451	1,451	0	237
Texas Railroad District No. 1 (South)	228,920	158,030	70,890	33,843
Texas Railroad District No. 2	394,569	381,180	13,389	191,513
Texas Railroad District No. 3	127,410	111,657	15,753	24,549
Texas Railroad District No. 4	653,649	575,668	77,981	137,766
Texas Railroad District No. 5	1,391	35	1,356	486
Texas Railroad District No. 6	760,001	751,234	8,767	95,820
Texas Railroad District No. 7B	669	0	669	78
Texas Railroad District No. 7C	176,787	106,037	70,750	36,075
Texas Railroad District No. 8	425,145	297,159	127,986	70,921
Texas Railroad District No. 8A	3,563	984	2,579	1,279
Texas Railroad District No. 9	146,196	125,607	20,589	38,391
Texas Railroad District No. 10	1,384,205	1,317,845	66,360	176,736
Total Texas Offshore	2,021,405	1,962,653	58,752	449,813
Utah	270,761	270,527	234	21,710
Virginia	128,092	128,092	0	16,165
Washington	6,604	6,604	0	0
West Virginia	1,609,044	1,458,179	150,865	118,556
Wyoming	2,033,820	1,786,865	246,955	184,577
Undesignated[b]	1,444,276	1,444,276	0	84
Total All States	37,685,381	34,064,435	3,620,946	4,843,332

[a] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[b] Includes reserves in underground storage which were reported without a State designation.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Alabama				
Florida Gas Transmission Co[a]	39,859	35,841	4,018	7,087
Southern Natural Gas Co[a]	142,000	141,536	464	18,698
Tennessee Gas Pipeline Div Tenneco	33,786	33,686	102	6,778
Texas Eastern Transmission Corp[a]	0	0	0	1,857
United Gas Pipe Line Co[a]	1,717	1,717	0	0
State Total	217,364	212,780	4,584	34,420
Arizona				
El Paso Natural Gas Co[a]	93	93	0	13
State Total	93	93	0	13
Arkansas				
Arkansas Oklahoma Gas Corp	7,119	7,119	0	954
Arkla Inc[a]	1,073,933	1,064,714	9,219	84,725
Columbia Gas Transmission Corp[a]	56,104	56,104	0	2,839
International Paper Co	1,500	1,500	0	169
Louisiana-Nevada Transit Co	30,935	30,935	0	0
Mississippi River Transmission Corp	639,879	639,871	8	67,930
Tennessee Gas Pipeline Div Tenneco	45,284	45,284	0	5,691
Texas Eastern Transmission Corp[a]	1,538	1,278	260	4,170
Texas Gas Transmission Corp[a]	0	0	0	274
State Total	1,856,292	1,846,805	9,487	166,752
California				
Pacific Interstate Offshore Co	76,642	0	76,642	12,068
Pacific Offshore Pipeline Co	153,300	0	153,300	12,441
State Total	229,942	0	229,942	24,509
Colorado				
Colorado Interstate Gas Co[a]	47,388	36,136	11,252	8,171
El Paso Natural Gas Co[a]	31,735	2,371	29,364	3,275
K N Energy Inc[a]	58,667	58,667	0	5,673
Natural Gas Pipeline Co of America[a]	17,532	16,566	966	2,245
Northern Natural Div InterNorth Inc[a]	1,771	1,102	669	913
Northwest Pipeline Corp[a]	154,429	106,455	47,974	1,254
Panhandle Eastern Pipe Line Co[a]	53,920	17,921	35,999	6,521
Questar Pipeline Company	72,314	72,314	0	10,128
Williams Natural Gas Co[a]	50,837	50,837	0	4,491
State Total	488,593	362,369	126,224	42,671
Florida				
Florida Gas Transmission Co[a]	6,933	0	6,933	1,477
Tennessee Gas Pipeline Div Tenneco	2,324	0	2,324	0
State Total	9,257	0	9,257	1,477
Illinois				
Mississippi River Transmission Corp	456	456	0	0
Natural Gas Pipeline Co of America[a]	0	0	0	9
Texas Eastern Transmission Corp[a]	2,407	1,929	478	905
Trunkline Gas Co[a]	12	12	0	203
State Total	2,875	2,397	478	1,117
Indiana				
Texas Gas Transmission Corp[a]	0	0	0	1
State Total	0	0	0	1
Kansas				
ANR Pipeline Co[a]	4,275	4,250	25	874
Arkla Inc[a]	1,618	1,618	0	133
Colorado Interstate Gas Co[a]	481,647	481,647	0	33,981
K N Energy Inc[a]	588,750	588,750	0	39,735
Mississippi River Transmission Corp	0	0	0	47
Natural Gas Pipeline Co of America[a]	2,127	1,828	299	264
Northern Natural Div InterNorth Inc[a]	300,798	299,033	1,765	42,709
Panhandle Eastern Pipe Line Co[a]	108,083	101,480	6,603	6,509
Williams Natural Gas Co[a]	1,597,361	1,597,361	0	62,086
Zenith Natural Gas Co	5,790	0	5,790	1,420

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
State Total	3,090,449	3,075,967	14,482	187,778
Kentucky				
Columbia Gas Transmission Corp[a]	238,724	238,724	0	16,740
Inland Gas Co Inc	28,295	28,295	0	1,995
Kentucky West Va Gas Co	325,542	325,542	0	21,813
Tennessee Gas Pipeline Div Tenneco	3,815	3,815	0	0
Texas Eastern Transmission Corp[a]	591	591	0	99
Texas Gas Transmission Corp[a]	476	476	0	42
State Total	597,443	597,443	0	40,689
Louisiana				
Northern Louisiana				
ANR Pipeline Co[a]	2,284	2,204	80	0
Arkla Inc[a]	267,511	267,346	165	27,713
CNG Transmission Corp[a]	0	0	0	22
Columbia Gas Transmission Corp[a]	117,031	116,749	282	9,608
Florida Gas Transmission Co[a]	79,449	79,388	61	13,751
International Paper Co	13,147	10,647	2,500	2,118
Louisiana-Nevada Transit Co	17,489	17,489	0	1,056
Mid Louisiana Gas Co	64,375	0	64,375	9,881
Mississippi River Transmission Corp	117,737	117,737	0	14,182
Natural Gas Pipeline Co of America[a]	31	31	0	0
Southern Natural Gas Co[a]	99,189	99,104	85	14,312
Tennessee Gas Pipeline Div Tenneco	8,401	8,399	2	2,011
Texas Eastern Transmission Corp[a]	129,020	128,865	155	17,931
Texas Gas Transmission Corp[a]	67,427	51,666	15,761	7,769
Transcontinental Gas Pipe Line Corp[a]	19,693	2,296	17,397	2,742
Trunkline Gas Co[a]	25,138	25,065	73	199
United Gas Pipe Line Co[a]	71,668	71,327	341	1,230
Area Total	1,099,590	998,313	101,277	124,525
Southern Louisiana Onshore				
Algonquin Gas Transmission Co	0	0	0	49
ANR Pipeline Co[a]	25,197	24,037	1,160	3,679
Bayou Interstate Pipeline System	217	217	0	435
CNG Transmission Corp[a]	819	819	0	803
Columbia Gas Transmission Corp[a]	524,242	502,486	21,756	67,047
Eastern Shore Natural Gas Co	0	0	0	973
Florida Gas Transmission Co[a]	76,815	68,579	8,236	23,783
Mid Louisiana Gas Co	432	0	432	323
Mississippi River Transmission Corp	2,342	2,342	0	2,691
Pennsylvania & Southern Gas Co	247	0	247	0
Southern Natural Gas Co[a]	78,308	33,788	44,520	18,921
Tennessee Gas Pipeline Div Tenneco	215,132	188,523	26,609	33,086
Texas Eastern Transmission Corp[a]	60,698	53,762	6,936	6,993
Texas Gas Transmission Corp[a]	633,057	624,087	8,970	47,209
Transcontinental Gas Pipe Line Corp[a]	179,912	172,101	7,811	29,103
Trunkline Gas Co[a]	25,089	20,353	4,736	6,318
United Gas Pipe Line Co[a]	8,753	7,967	786	784
Area Total	1,831,260	1,699,061	132,199	242,197
Southern Louisiana Warranty[b]				
Texas Eastern Transmission Corp[a]	0	0	0	128,889
Area Total	0	0	0	128,889
Southern Louisiana Offshore				
ANR Pipeline Co[a]	279,189	221,504	57,685	56,755
Arkla Inc[a]	30,063	30,063	0	1,529
CNG Transmission Corp[a]	129,278	116,553	12,725	12,104
Columbia Gas Transmission Corp[a]	943,389	820,215	123,174	82,682
Eastern Shore Natural Gas Co	0	0	0	962
Florida Gas Transmission Co[a]	154,021	147,754	6,267	32,501
Mid Louisiana Gas Co	21,799	0	21,799	7,412
Mississippi River Transmission Corp	0	0	0	2,603
Natural Gas Pipeline Co of America[a]	180,871	155,214	25,657	29,450
Northern Natural Div InterNorth Inc[a]	72,538	29,207	43,331	34,618

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Southern Louisiana Offshore				
Panhandle Eastern Pipe Line Co[a]	12,267	12,267	0	141
Sea Robin Pipeline Co[a]	54,720	44,828	9,892	1,144
Southern Natural Gas Co[a]	598,203	465,689	132,514	150,395
Tennessee Gas Pipeline Div Tenneco	1,398,837	1,234,122	164,715	250,951
Texas Eastern Transmission Corp[a]	2,024,664	1,763,097	261,567	206,584
Texas Gas Transmission Corp[a]	146,656	128,233	18,423	21,688
Transcontinental Gas Pipe Line Corp[a]	708,923	569,316	139,607	181,245
Trunkline Gas Co[a]	544,447	483,178	61,269	119,446
United Gas Pipe Line Co[a]	54,602	36,820	17,782	9,823
Area Total	7,354,467	6,258,060	1,096,407	1,202,033
State Total	10,285,317	8,955,434	1,329,883	1,697,644
Maryland				
Columbia Gas Transmission Corp[a]	562	562	0	44
Texas Eastern Transmission Corp[a]	41,268	41,268	0	0
Washington Gas Light Co	0	0	0	83,732
State Total	41,830	41,830	0	83,776
Massachusetts				
Granite State Gas Transmission Inc	0	0	0	18,255
State Total	0	0	0	18,255
Michigan				
ANR Pipeline Co[a]	114,063	114,063	0	0
Michigan Gas Storage Co	48	48	0	15,996
State Total	114,111	114,111	0	15,996
Mississippi				
Alabama-Tennessee Natural Gas Co	0	0	0	938
ANR Pipeline Co[a]	1,007	1,007	0	91
Eastern Shore Natural Gas Co	0	0	0	2,242
Florida Gas Transmission Co[a]	41,273	39,792	1,481	20,558
Mid Louisiana Gas Co	2,633	0	2,633	1,180
Southern Natural Gas Co[a]	107,916	107,760	156	12,568
Tennessee Gas Pipeline Div Tenneco	45,776	43,812	1,964	13,218
Texas Eastern Transmission Corp[a]	5,550	5,509	41	39,233
Transcontinental Gas Pipe Line Corp[a]	110,788	109,571	1,217	20,400
United Gas Pipe Line Co[a]	5,194	4,705	489	309
State Total	320,137	312,156	7,981	110,737
Missouri				
Williams Natural Gas Co[a]	13,258	13,258	0	9,583
State Total	13,258	13,258	0	9,583
Montana				
K N Energy Inc[a]	119,939	119,939	0	3,657
Northern Natural Div InterNorth Inc[a]	35,651	35,650	1	14,089
Williston Basin Interstate Pipeline[a]	283,899	115,422	168,477	4,332
State Total	439,489	271,011	168,478	22,078
Nebraska				
K N Energy Inc[a]	87,641	87,641	0	320
State Total	87,641	87,641	0	320
New Mexico				
San Juan Basin				
El Paso Natural Gas Co[a]	1,797,288	1,705,854	91,434	83,731
Natural Gas Pipeline Co of America[a]	13	13	0	0
Northwest Pipeline Corp[a]	289,282	289,282	0	11,434
Area Total	2,086,583	1,995,149	91,434	95,165
New Mexico Permian Basin				
El Paso Natural Gas Co[a]	314,304	114,743	199,561	24,379
Natural Gas Pipeline Co of America[a]	102,502	100,470	2,032	10,433
Northern Natural Div InterNorth Inc[a]	81,895	54,847	27,048	19,513
Tennessee Gas Pipeline Div Tenneco	1,554	1,554	0	0

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
New Mexico Permian Basin				
Transcontinental Gas Pipe Line Corp[a]	83	93	0	31
Transwestern Pipeline Co[a]	309,488	251,192	58,296	72,344
United Gas Pipe Line Co[a]	2,056	2,056	0	0
Area Total	811,882	524,945	286,937	126,700
State Total	2,898,465	2,520,094	378,371	221,865
New York				
CNG Transmission Corp[a]	11,863	11,863	0	344
Columbia Gas Transmission Corp[a]	67,916	67,916	0	2,426
National Fuel Gas Supply Corp	47,988	47,988	0	2,626
Orange & Rockland Utilities Inc	7,870	7,870	0	29,328
Tennessee Gas Pipeline Div Tenneco	7,475	7,475	0	22
State Total	143,112	143,112	0	34,746
North Dakota				
Williston Basin Interstate Pipeline[a]	35,207	0	35,207	12,462
State Total	35,207	0	35,207	12,462
Ohio				
Columbia Gas Transmission Corp[a]	215,064	199,426	15,638	9,759
Gas Transport Inc	10,178	0	10,178	1,018
Tennessee Gas Pipeline Div Tenneco	6,946	6,946	0	116
Texas Eastern Transmission Corp[a]	3,531	3,531	0	1,040
State Total	235,719	209,903	25,816	11,933
Oklahoma				
ANR Pipeline Co[a]	327,463	309,976	17,487	44,945
Arkansas Oklahoma Gas Corp	26,497	26,497	0	1,335
Arkla Inc[a]	1,565,532	1,555,662	9,870	156,100
Colorado Interstate Gas Co[a]	147,748	147,748	0	20,299
Columbia Gas Transmission Corp[a]	16,739	16,739	0	1,612
El Paso Natural Gas Co[a]	321,760	291,357	30,403	26,252
K N Energy Inc[a]	56,924	56,909	15	10,344
Lone Star Gas Co Div Enserch Corp	88,876	11,402	77,474	14,114
Mississippi River Transmission Corp	53,025	53,025	0	19,850
Natural Gas Pipeline Co of America[a]	125,418	119,814	5,604	21,361
Northern Natural Div InterNorth Inc[a]	231,168	225,663	5,505	60,099
Northwest Pipeline Corp[a]	-0	0	0	40
Panhandle Eastern Pipe Line Co[a]	241,109	221,798	19,311	9,164
Ringwood Gathering Co	40,361	0	40,361	8,332
Tennessee Gas Pipeline Div Tenneco	42,199	42,195	4	6,631
Texas Gas Transmission Corp[a]	405	405	0	114
Transwestern Pipeline Co[a]	146,837	141,749	5,088	28,456
United Gas Pipe Line Co[a]	3,158	3,158	0	0
Western Gas Interstate Co	17,539	0	17,539	1,730
Williams Natural Gas Co[a]	496,919	496,919	0	29,711
Zenith Natural Gas Co	685	0	685	75
State Total	3,950,362	3,721,016	229,346	460,564
Pennsylvania				
Carnegie Natural Gas Co	16,564	16,564	0	7,494
CNG Transmission Corp[a]	149,174	149,174	0	8,168
Columbia Gas Transmission Corp[a]	169,086	169,086	0	8,807
Equitrans Inc.	30,770	30,770	0	2,835
National Fuel Gas Supply Corp	226,780	226,780	0	13,209
North Penn Gas Co	8,971	8,971	0	1,594
Tennessee Gas Pipeline Div Tenneco	102,371	1,220	101,151	0
Texas Eastern Transmission Corp[a]	75,078	75,078	0	477
State Total	778,794	677,643	101,151	42,584
South Dakota				
Williston Basin Interstate Pipeline[a]	2,293	0	2,293	549
State Total	2,293	0	2,293	549

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Tennessee				
East Tennessee Natural Gas Co	14,091	0	14,091	2,179
Texas Gas Transmission Corp[a]	0	0	0	35
State Total	14,091	0	14,091	2,214
Texas Railroad District No. 1 (North)				
Northern Natural Div InterNorth Inc[a]	1,451	1,451	0	237
District Total	1,451	1,451	0	237
Texas Railroad District No. 1 (South)				
Natural Gas Pipeline Co of America[a]	220	220	0	17
Northern Natural Div InterNorth Inc[a]	4,964	4,730	234	5,435
Tennessee Gas Pipeline Div Tenneco	3,179	3,179	0	1,393
Texas Eastern Transmission Corp[a]	176,017	112,949	63,068	17,754
Transcontinental Gas Pipe Line Corp[a]	44,540	36,952	7,588	9,244
District Total	228,920	158,030	70,890	33,843
Texas Railroad District No. 2				
Florida Gas Transmission Co[a]	179,669	178,703	966	136,205
Mississippi River Transmission Corp	0	0	0	20,750
Natural Gas Pipeline Co of America[a]	2,679	2,617	62	1,568
Tennessee Gas Pipeline Div Tenneco	25,685	20,704	4,981	5,973
Texas Eastern Transmission Corp[a]	133,623	132,451	1,172	18,248
Transcontinental Gas Pipe Line Corp[a]	41,210	36,542	4,668	5,594
Trunkline Gas Co[a]	4,003	3,990	13	2,801
United Gas Pipe Line Co[a]	7,500	5,973	1,527	370
Valero Interstate Transmission Co[a]	200	200	0	4
District Total	394,569	381,180	13,389	191,513
Texas Railroad District No. 3				
Algonquin Gas Transmission Co	0	0	0	23
Columbia Gas Transmission Corp[a]	5,807	5,807	0	1,183
Eastern Shore Natural Gas Co	0	0	0	533
Florida Gas Transmission Co[a]	6,846	6,121	725	1,620
Natural Gas Pipeline Co of America[a]	2,271	2,055	216	998
Northern Natural Div InterNorth Inc[a]	6,712	2,932	3,780	1,542
Tennessee Gas Pipeline Div Tenneco	32,438	29,382	3,056	5,801
Texas Eastern Transmission Corp[a]	30,986	30,434	552	4,469
Texas Gas Pipeline Corp	17,588	17,588	0	3,739
Texas Gas Transmission Corp[a]	10,691	10,691	0	600
Transcontinental Gas Pipe Line Corp[a]	4,033	2,465	1,568	377
Trunkline Gas Co[a]	8,830	3,088	5,742	3,661
United Gas Pipe Line Co[a]	1,208	1,094	114	3
District Total	127,410	111,657	15,753	24,549
Texas Railroad District No. 4				
Columbia Gas Transmission Corp[a]	66,000	0	66,000	6,104
Florida Gas Transmission Co[a]	35,894	35,664	230	16,957
Mississippi River Transmission Corp	0	0	0	4,780
Natural Gas Pipeline Co of America[a]	78,847	75,676	3,171	8,260
Tennessee Gas Pipeline Div Tenneco	259,361	254,391	4,970	55,646
Texas Eastern Transmission Corp[a]	123,426	122,618	808	10,586
Transcontinental Gas Pipe Line Corp[a]	69,214	67,076	2,138	27,876
Trunkline Gas Co[a]	848	324	524	785
United Gas Pipe Line Co[a]	1,394	1,254	140	19
Valero Interstate Transmission Co[a]	18,665	18,665	0	6,753
District Total	653,649	575,668	77,981	137,766
Texas Railroad District No. 5				
United Gas Pipe Line Co[a]	1,391	35	1,356	486
District Total	1,391	35	1,356	486
Texas Railroad District No. 6				
Arkla Inc[a]	315,268	313,412	1,856	20,365
Eastern Shore Natural Gas Co	0	0	0	155
Mississippi River Transmission Corp	17,432	17,341	91	8,073
Natural Gas Pipeline Co of America[a]	8,484	8,080	404	1,015

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Texas Railroad District No. 6				
Southern Natural Gas Co[a]	29,651	29,095	556	8,103
Tennessee Gas Pipeline Div Tenneco	91,794	91,777	17	26,740
Texas Eastern Transmission Corp[a]	229,914	226,891	3,023	21,114
Texas Gas Transmission Corp[a]	33,444	33,327	117	6,430
Transcontinental Gas Pipe Line Corp[a]	425	425	0	198
United Gas Pipe Line Co[a]	33,589	30,886	2,703	3,627
District Total	760,001	751,234	8,767	95,820
Texas Railroad District No. 7B				
El Paso Natural Gas Co[a]	669	0	669	78
District Total	669	0	669	78
Texas Railroad District No. 7C				
El Paso Natural Gas Co[a]	121,299	61,541	59,758	12,233
Natural Gas Pipeline Co of America[a]	826	826	0	235
Northern Natural Div InterNorth Inc[a]	54,414	43,422	10,992	23,584
Panhandle Eastern Pipe Line Co[a]	248	248	0	23
District Total	176,787	106,037	70,750	36,075
Texas Railroad District No. 8				
El Paso Natural Gas Co[a]	135,870	67,568	68,302	20,878
Natural Gas Pipeline Co of America[a]	3,430	3,430	0	2,657
Northern Natural Div InterNorth Inc[a]	121,237	88,522	32,715	32,222
Texas Gas Transmission Corp[a]	732	732	0	1
Transcontinental Gas Pipe Line Corp[a]	198	198	0	24
Transwestern Pipeline Co[a]	163,678	136,709	26,969	15,139
District Total	425,145	297,159	127,986	70,921
Texas Railroad District No. 8A				
El Paso Natural Gas Co[a]	1,454	0	1,454	130
Northern Natural Div InterNorth Inc[a]	2,109	984	1,125	1,149
District Total	3,563	984	2,579	1,279
Texas Railroad District No. 9				
Lone Star Gas Co Div Enserch Corp	6,987	6,277	710	114
Natural Gas Pipeline Co of America[a]	139,209	119,330	19,879	38,277
District Total	146,196	125,607	20,589	38,391
Texas Railroad District No. 10				
ANR Pipeline Co[a]	16,366	14,035	2,331	2,386
Arkla Inc[a]	60,703	60,703	0	5,711
Caprock Pipeline Co	33,407	33,407	0	0
Colorado Interstate Gas Co[a]	549,519	531,204	18,315	43,197
El Paso Natural Gas Co[a]	22,867	21,470	1,397	2,573
K N Energy Inc[a]	2,844	2,844	0	2,503
Mississippi River Transmission Corp	40,234	39,386	848	4,900
Natural Gas Pipeline Co of America[a]	135,357	132,748	2,609	20,683
Northern Natural Div InterNorth Inc[a]	194,250	185,035	9,215	59,759
Panhandle Eastern Pipe Line Co[a]	120,856	118,542	2,314	2,959
Southern Natural Gas Co[a]	1,023	352	671	438
Transcontinental Gas Pipe Line Corp[a]	70	70	0	0
Transwestern Pipeline Co[a]	132,815	104,843	27,972	22,149
Western Gas Interstate Co	688	0	688	1,636
Williams Natural Gas Co[a]	73,206	73,206	0	7,842
District Total	1,384,205	1,317,845	66,360	176,736
Texas Offshore				
ANR Pipeline Co[a]	158,521	136,731	21,790	27,098
CNG Transmission Corp[a]	97,951	97,951	0	20,010
Columbia Gas Transmission Corp[a]	74,485	73,536	949	2,822
Eastern Shore Natural Gas Co	0	0	0	605
El Paso Natural Gas Co[a]	18,529	18,529	0	474
Florida Gas Transmission Co[a]	28,539	28,470	69	12,955
Natural Gas Pipeline Co of America[a]	72,756	71,549	1,207	11,598
Northern Natural Div InterNorth Inc[a]	21,864	20,872	992	20,923
Panhandle Eastern Pipe Line Co[a]	2,284	1,992	292	985

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Texas Offshore				
Southern Natural Gas Co[a]	111,838	107,448	4,390	13,892
Tennessee Gas Pipeline Div Tenneco	239,500	236,638	2,862	27,116
Texas Eastern Transmission Corp[a]	155,688	155,688	0	21,880
Texas Gas Transmission Corp[a]	88,242	75,663	12,579	20,023
Transcontinental Gas Pipe Line Corp[a]	871,167	859,616	11,551	255,256
Trunkline Gas Co[a]	36,542	35,843	699	10,071
United Gas Pipe Line Co[a]	43,499	42,127	1,372	4,135
District Total	2,021,405	1,962,653	58,752	449,813
State Total	6,325,361	5,789,540	535,821	1,257,507
Utah				
Colorado Interstate Gas Co[a]	134,530	134,530	0	6,095
El Paso Natural Gas Co[a]	227	0	227	21
Natural Gas Pipeline Co of America[a]	217	210	7	207
Northwest Pipeline Corp[a]	68,016	68,016	0	148
Questar Pipeline Company	67,771	67,771	0	15,239
State Total	270,761	270,527	234	21,710
Virginia				
Columbia Gas Transmission Corp[a]	94,026	94,026	0	6,376
East Tennessee Natural Gas Co	34,066	34,066	0	9,789
State Total	128,092	128,092	0	16,165
Washington				
Northwest Pipeline Corp[a]	6,604	6,604	0	0
State Total	6,604	6,604	0	0
West Virginia				
Carnegie Natural Gas Co	46,494	46,494	0	3,559
CNG Transmission Corp[a]	628,428	628,428	0	51,825
Columbia Gas Transmission Corp[a]	611,631	611,631	0	36,163
Eastern Shore Natural Gas Co	0	0	0	1,541
Equitrans Inc.	262,330	111,465	150,865	25,415
Tennessee Gas Pipeline Div Tenneco	56,240	56,240	0	0
Texas Eastern Transmission Corp[a]	841	841	0	53
Washington Gas Light Co	3,080	3,080	0	0
State Total	1,609,044	1,458,179	150,865	118,556
Wyoming				
ANR Pipeline Co[a]	458,934	458,934	0	21,584
Colorado Interstate Gas Co[a]	479,166	475,459	3,707	34,449
Columbia Gas Transmission Corp[a]	335,122	335,122	0	3,530
Glacier Gas Co	2,529	2,529	0	355
K N Energy Inc[a]	78,540	78,540	0	14,179
MIGC Inc	29,033	0	29,033	3,012
Natural Gas Pipeline Co of America[a]	8,168	8,168	0	8,287
Northern Natural Div InterNorth Inc[a]	9,702	194	9,508	9,520
Northwest Pipeline Corp[a]	135,491	35,156	100,335	15,681
Pacific Gas Transmission Co	23,834	23,834	0	2,061
Panhandle Eastern Pipe Line Co[a]	76,055	11,809	64,246	13,791
Questar Pipeline Company	289,065	289,065	0	30,129
Williams Natural Gas Co[a]	35,782	35,782	0	18,278
Williston Basin Interstate Pipeline[a]	72,399	32,273	40,126	9,721
State Total	2,033,820	1,786,865	246,955	184,577
Undesignated[c]				
Arkla Inc[a]	31,088	31,088	0	0
CNG Transmission Corp[a]	247,562	247,562	0	0
Colorado Interstate Gas Co[a]	66,233	66,233	0	0
Columbia Gas Transmission Corp[a]	538,177	538,177	0	0
Equitrans Inc.	39,141	39,141	0	0
Mid Louisiana Gas Co	1,500	1,500	0	0
Mississippi River Transmission Corp	0	0	0	84
Natural Gas Pipeline Co of America[a]	281,357	281,357	0	0
Panhandle Eastern Pipe Line Co[a]	113,023	113,023	0	0
Pennsylvania & Southern Gas Co	330	330	0	0

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1989 Year-End Reserves			Production
	Total	Non-associated	Other	
Undesignated[c]				
Questar Pipeline Company	19,624	19,624	0	0
Southern Natural Gas Co[a]	15,289	15,289	0	0
Texas Gas Transmission Corp[a]	106,241	106,241	0	0
Undesignated Total	1,459,565	1,459,565	0	84
Total All Companies	37,685,381	34,064,435	3,620,946	4,843,332

[a] Companies with over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing.
[b] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[c] Includes reserves in underground storage which were reported without a State designation.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Alabama						
	1963	12	0	13	0	0.9
	1964	240	240	12	228	20.0
	1965	201	7	46	-39	4.4
	1966	199	12	14	-2	14.2
	1967	198	0	1	-1	198.0
	1968	0	-197	1	-198	0
	1969	1,400	1,400	0	1,400	0
	1970	1,400	0	0	0	0
	1971	51,765	50,365	0	50,365	0
	1972	137,410	86,431	786	85,545	174.8
	1973	116,416	-18,728	2,266	-20,994	51.4
	1974	110,719	-400	5,297	-5,697	20.9
	1975	95,150	-10,089	5,480	-15,569	17.4
	1976	92,434	3,085	5,801	-2,716	15.9
	1977	77,720	-6,009	8,705	-14,714	8.9
	1978	72,407	7,946	13,259	-5,313	5.5
	1979	159,013	103,916	17,310	86,606	9.2
	1980	155,576	33,155	36,592	-3,437	4.3
	1981	176,565	61,856	40,867	20,989	4.3
	1982	145,743	8,131	38,953	-30,822	3.7
	1983	192,535	76,871	30,079	46,792	6.4
	1984	145,678	-13,204	33,653	-46,857	4.3
	1985	178,606	69,029	36,101	32,928	4.9
	1986	168,152	15,426	25,880	-10,454	6.5
	1987	114,105	-26,520	27,527	-54,047	4.1
	1988	111,617	26,223	30,711	-2,488	3.6
	1989	217,364	140,167	34,420	105,747	6.3
Total (1963-1989)		—	611,113	393,761	217,352	—
Percent Change		1,811,266.7	—	264,660.2	—	—
Arizona						
	1963	26,400	0	1,300	0	20.3
	1964	21,000	-3,900	1,500	-5,400	14.0
	1965	19,200	0	1,800	-1,800	10.7
	1966	20,400	2,900	1,700	1,200	12.0
	1967	19,100	0	1,300	-1,300	14.7
	1968	18,200	0	900	-900	20.2
	1969	13,100	-4,000	1,100	-5,100	11.9
	1970	11,900	0	1,200	-1,200	9.9
	1971	11,100	0	800	-800	13.9
	1972	10,600	0	500	500	21.2
	1973	698	-9,700	202	-9,902	3.5
	1987	50	-575	73	-648	.7
	1988	846	805	9	796	94.0
	1989	93	-740	13	-753	7.2
Total (1963-1989)		—	-15,210	11,097	-26,307	—
Percent Change		-99.6	—	-99.0	—	—
Arkansas						
	1963	1,143,481	0	47,190	0	24.2
	1964	1,336,350	240,653	47,784	192,869	28.0
	1965	1,578,888	296,758	54,220	242,538	29.1
	1966	1,699,979	198,150	77,059	121,091	22.1
	1967	1,903,551	294,286	90,714	203,572	21.0
	1968	1,884,438	94,242	113,355	-19,113	16.6
	1969	1,780,019	33,941	138,360	-104,419	12.9
	1970	1,727,915	91,999	144,103	-52,104	12.0
	1971	1,700,972	104,592	131,535	-26,943	12.9
	1972	1,709,983	136,101	127,090	9,011	13.5
	1973	1,719,005	131,247	122,225	9,022	14.1
	1974	1,631,016	-446	87,543	-87,989	18.6
	1975	1,546,842	-8,087	76,087	-84,174	20.3
	1976	1,510,634	34,596	70,806	-36,208	21.3
	1977	1,466,949	31,309	74,994	-43,685	19.6
	1578	1,318,789	-60,352	87,808	-148,160	15.0
	1979	1,284,003	42,424	77,210	-34,786	16.6
	980	1,225,663	13,256	71,596	-58,340	17.1
	1981	1,289,247	130,727	67,143	63,584	19.2
	1982	1,346,979	145,493	87,761	57,732	15.3
	1983	1,396,771	128,954	79,162	49,792	17.6
	1984	1,388,472	75,235	83,534	-8,299	16.6
	1985	1,364,442	90,486	114,516	-24,030	11.9
	1986	1,399,368	173,829	138,803	34,926	10.1
	1987	1,421,750	189,267	166,885	22,382	8.5
	1988	1,454,149	2^1,977	169,578	32,399	8.6

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Arkansas						
	1989	1,856,292	568,895	166,752	402,143	11.1
Total (1963-1989)		—	3,379,534	2,666,723	712,811	—
Percent Change		62.3	—	253.4	—	—
California						
	1984	328,108	328,108	0	328,108	0
	1985	286,959	-41,149	0	-41,149	0
	1986	251,721	-35,238	0	-35,238	0
	1987	116,244	-114,746	20,731	-135,477	5.6
	1988	258,912	170,357	27,589	142,668	9.4
	1989	229,942	-4,461	24,509	-28,970	9.4
Total (1963-1989)		—	302,871	72,929	229,942	—
Percent Change		-29.9	—	—	—	—
Colorado						
	1963	1,030,172	0	40,174	0	25.6
	1964	1,040,997	52,969	42,144	10,825	24.7
	1965	1,438,536	446,551	49,012	397,539	29.4
	1966	1,730,282	350,064	58,318	291,746	29.7
	1967	1,693,474	28,583	65,391	-36,808	25.9
	1968	1,703,917	84,874	74,431	10,443	22.9
	1969	1,636,648	7,733	75,002	-67,269	21.8
	1970	1,986,609	430,847	80,866	349,981	24.6
	1971	1,902,460	-4,080	80,069	-84,149	23.8
	1972	1,797,207	-22,117	83,136	-105,253	21.6
	1973	1,974,426	279,073	101,854	177,219	19.4
	1974	1,700,975	-169,958	103,493	-273,451	16.4
	1975	1,875,520	310,137	135,592	174,545	13.8
	1976	1,652,940	-84,285	138,295	-222,580	12.0
	1977	1,789,280	283,423	147,083	136,340	12.2
	1978	1,820,473	181,618	150,425	31,193	12.1
	1979	2,102,443	437,049	155,079	281,970	13.6
	1980	2,215,759	270,701	157,385	113,316	14.1
	1981	1,702,316	-354,804	158,639	-513,443	10.7
	1982	1,687,950	146,473	160,839	-14,366	10.5
	1983	1,716,983	151,073	122,040	29,033	14.1
	1984	1,554,239	-46,482	116,262	-162,744	13.4
	1985	1,513,729	54,670	95,180	-40,510	15.9
	1986	1,469,350	36,567	80,949	-44,370	18.2
	1987	1,285,922	-113,454	69,974	-183,428	18.4
	1988	829,242	-389,635	68,045	-456,680	12.2
	1989	488,593	-297,978	42,671	-340,649	11.5
Total (1963-1989)		—	2,070,612	2,612,191	-541,579	—
Percent Change		-52.6	—	6.2	—	—
Florida						
	1970	11,998	12,000	2	11,998	5,999.0
	1971	359,309	348,000	689	347,311	521.5
	1972	355,296	9,103	13,116	-4,013	27.1
	1973	314,560	-14,003	26,733	-40,736	11.8
	1974	259,535	-28,087	26,938	-55,025	9.6
	1975	233,475	-5,574	20,486	-26,060	11.4
	1976	217,340	0	16,135	-16,135	13.5
	1977	100,332	-100,002	17,006	-117,008	5.9
	1978	82,014	121	18,439	-18,318	4.4
	1979	64,193	0	17,821	-17,821	3.6
	1980	38,534	-10,663	14,996	-25,659	2.6
	1981	25,802	-3,073	9,659	-12,732	2.7
	1982	24,782	6,704	7,724	-1,020	3.2
	1983	49,506	31,109	6,385	24,724	7.8
	1984	46,540	-51	2,915	-2,966	16.0
	1985	55,130	11,359	2,769	8,590	19.9
	1986	46,529	-6,713	1,888	-8,601	24.6
	1987	13,641	-30,699	2,189	-32,888	6.2
	1988	10,194	-1,409	2,038	-3,447	5.0
	1989	9,257	540	1,477	-937	6.3
Total (1963-1989)		—	218,662	209,405	9,257	—
Percent Change		-22.8	—	73,750.0	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Idaho:						
	1981	0	524	524	0	0.0
	1982	0	78	78	0	0
Total (1963-1989)		—	602	602	—	—
Percent Change		—	—	-100.0	—	—
Illinois						
	1963	1,596	0	429	0	3.7
	1964	0	-1,198	398	-1,596	0
	1972	266	361	95	266	2.8
	1973	0	-197	69	-266	0
	1976	0	131	131	0	0
	1978	534	726	192	534	2.8
	1979	251	-97	166	-283	1.3
	1980	60,105	60,095	241	59,854	249.4
	1981	5,864	-54,046	195	-54,241	30.1
	1982	5,988	670	476	124	12.6
	1983	4,342	-1,412	234	-1,646	18.6
	1984	4,548	423	217	206	21.0
	1985	8,339	5,010	1,219	3,791	6.8
	1986	8,021	5,423	5,741	-318	1.4
	1987	25,834	32,311	14,498	17,813	1.8
	1988	9,374	-1,061	15,399	-16,460	.6
	1989	2,875	-5,382	1,117	-6,499	2.5
Total (1963-1989)		—	41,687	40,408	1,279	—
Percent Change		80.1	—	161.0	—	—
Indiana						
	1978	120	153	33	120	3.6
	1979	1,668	1,714	166	1,548	10.0
	1980	253,778	261,697	9,587	252,110	26.5
	1981	117,249	-130,367	6,162	-136,529	19.0
	1982	814	-116,397	38	-116,435	21.4
	1983	398	-408	8	-416	49.8
	1984	13	-385	0	-385	0
	1988	0	-11	2	-13	0
	1989	0	1	1	0	0
Total (1963-1989)		—	15,997	15,997	—	—
Percent Change		-100.0	—	-97.0	—	—
Iowa						
	1980	53,636	53,636	0	53,636	0
	1987	0	-17,734	35,902	-53,636	0
	1988	12,864	39,784	26,920	12,864	.5
Total (1963-1989)		—	75,686	62,822	12,864	—
Percent Change		-100.0	—	—	—	—
Kansas						
	1963	15,414,829	0	633,661	0	24.3
	1964	15,172,476	415,822	656,175	-242,353	23.1
	1965	14,733,216	223,113	662,373	-439,260	22.2
	1966	14,130,876	96,987	699,327	-602,340	20.2
	1967	13,748,844	334,322	716,354	-382,032	19.2
	1968	13,911,541	843,192	680,495	162,697	20.4
	1969	13,453,114	269,893	728,320	-458,427	18.5
	1970	13,003,376	279,017	728,753	-449,736	17.8
	1971	12,472,320	178,356	709,414	-531,058	17.6
	1972	11,945,000	182,875	710,195	-527,320	16.8
	1973	11,351,124	132,431	726,307	-593,876	15.6
	1974	11,273,113	635,968	713,979	-78,011	15.8
	1975	11,062,302	479,981	690,792	-210,811	16.0
	1976	10,858,348	477,044	680,998	-203,954	15.9
	1977	10,650,682	431,830	639,496	-207,666	16.7
	1978	10,151,516	199,024	698,190	-499,166	14.5
	1979	9,862,380	364,332	653,468	-289,136	15.1
	1980	9,517,351	221,350	566,379	-345,029	16.8
	1981	9,108,891	63,607	472,067	-408,460	19.3
	1982	9,961,026	1,163,084	310,949	852,135	32.0
	1983	9,757,636	96,453	299,843	-203,390	32.5
	1984	9,523,422	145,132	379,346	-234,214	25.1
	1985	9,065,960	-49,826	407,636	-457,462	22.2
	1986	9,091,941	385,174	359,193	25,981	25.3

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Kansas						
	1987	4,946,583	-3,921,454	223,904	-4,145,358	22.1
	1988	3,834,970	-944,274	167,339	-1,111,613	22.9
	1989	3,090,449	-556,743	187,778	-744,521	16.5
Total (1963-1989)		—	2,146,690	14,471,070	-12,324,380	—
Percent Change		-80.0	—	-70.4	—	—
Kentucky						
	1963	1,027,086	0	66,165	0	15.5
	1964	1,054,272	97,736	70,550	27,186	14.9
	1965	1,049,127	72,540	77,685	-5,145	13.5
	1966	1,033,140	65,006	80,993	-15,987	12.8
	1967	1,062,492	114,865	85,513	29,352	12.4
	1968	1,023,815	51,279	90,956	-36,677	11.3
	1969	952,167	2,145	73,793	-71,648	12.9
	1970	952,523	68,860	68,504	356	13.9
	1971	946,960	59,061	64,624	-5,563	14.7
	1972	535,127	-343,665	68,168	-411,833	7.9
	1973	505,612	34,716	64,231	-29,515	7.9
	1974	481,124	40,670	65,158	-24,488	7.4
	1975	453,776	35,933	63,281	-27,348	7.2
	1976	471,498	79,093	61,371	17,722	7.7
	1977	437,199	27,070	61,369	-34,299	7.1
	1978	397,996	11,387	50,590	-39,203	7.9
	1979	429,890	72,753	40,859	31,894	10.5
	1980	374,922	-7,413	47,555	-54,968	7.9
	1981	406,165	81,285	50,042	31,243	8.1
	1982	417,357	49,719	38,527	11,192	10.8
	1983	429,596	44,900	32,661	12,239	13.2
	1984	438,036	55,678	47,238	8,440	9.3
	1985	633,523	240,945	45,458	195,487	13.9
	1986	703,237	113,563	43,869	69,714	16.0
	1987	703,294	46,481	46,404	57	15.2
	1988	671,666	16,070	47,678	-31,608	14.1
	1989	597,443	-33,554	40,689	-74,243	14.7
Total (1963-1989)		—	1,088,123	1,527,766	-429,643	—
Percent Change		-41.8	—	-38.5	—	—
Louisiana						
	1963	71,660,292	0	3,232,917	0	22.2
	1964	70,930,073	2,756,029	3,486,248	-730,219	20.3
	1965	73,485,800	6,240,087	3,684,360	2,555,727	19.9
	1966	74,304,553	4,916,468	4,097,715	818,753	18.1
	1967	73,249,558	3,373,110	4,428,105	-1,054,995	16.5
	1968	72,383,868	3,975,226	4,840,916	-865,690	15.0
	1969	73,305,862	6,378,265	5,456,291	921,994	13.4
	1970	69,731,821	2,401,655	5,[illegible] 5,896	-3,574,041	11.[illegible]
	1971	63,895,982	213,889	6,049,728	-5,835,839	10.6
	1972	61,490,159	4,147,411	6,553,234	-2,405,823	9.4
	1973	53,715,078	-1,729,838	6,045,243	-7,775,081	8.9
	1974	47,835,241	-82,278	5,797,559	-5,879,837	8.3
	1975	40,449,235	-1,906,293	5,477,713	-7,386,006	7.4
	1976	36,510,313	1,369,878	5,308,800	-3,938,922	6.9
	1977	34,363,814	3,012,665	5,159,164	-2,146,499	6.7
	1978	33,004,924	3,787,824	5,146,714	-1,358,890	6.4
	1979	32,431,872	4,637,139	5,210,191	-573,052	6.2
	1980	31,209,323	3,938,655	5,161,204	-1,222,549	6.0
	1981	29,522,380	3,577,534	5,264,477	-1,666,943	5.6
	1982	28,184,859	3,421,905	4,759,426	-1,337,521	5.9
	1983	26,246,763	2,093,480	4,031,576	-1,938,096	6.5
	1984	24,230,485	2,546,400	4,562,679	-2,016,278	5.3
	1985	21,598,097	961,199	3,593,587	-2,632,388	6.0
	1986	19,570,383	1,025,358	3,053,072	-2,027,714	6.4
	1987	15,434,292	-1,630,818	2,505,273	-4,136,091	6.2
	1988	11,689,297	-1,518,138	2,226,857	-3,744,995	5.2
	1989	10,285,317	293,664	1,697,644	-1,403,980	6.1
Total (1963-1989)		—	58,198,696	119,573,671	-61,374,975	—
Percent Change		-85.6	—	-47.5	—	—
Northern Louisiana						
	1963	5,111,996	0	509,312	0	10.0
	1964	4,966,615	392,070	537,451	-145,381	9.2
	1965	4,747,032	267,235	486,821	-219,583	9.8
	1966	4,485,006	212,329	474,355	-262,026	9.5

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Northern Louisiana						
	1967	4,190,003	162,050	457,053	-295,003	9.2
	1968	3,709,615	-52,900	427,488	-480,388	8.7
	1969	3,460,367	161,250	410,498	-249,248	8.4
	1970	2,932,506	-145,171	382,690	-527,861	7.7
	1971	2,452,292	-165,338	314,876	-480,214	7.8
	1972	2,347,550	219,040	323,782	-104,742	7.3
	1973	2,030,616	-29,112	287,822	-316,934	7.1
	1974	1,758,235	-13,165	259,216	-272,381	6.8
	1975	1,524,887	-18,104	215,244	-233,348	7.1
	1976	1,565,816	243,940	203,011	40,929	7.7
	1977	1,517,543	137,389	185,662	-48,273	8.2
	1978	1,430,633	142,820	229,730	-86,910	6.2
	1979	1,429,924	184,165	184,874	-709	7.7
	1980	1,378,395	153,305	204,834	-51,529	6.7
	1981	1,965,194	810,868	224,069	586,799	8.8
	1982	2,168,026	428,107	225,275	202,832	9.6
	1983	2,231,416	270,570	207,180	63,390	10.8
	1984	2,152,622	161,153	239,947	-78,794	9.0
	1985	1,887,476	-19,036	246,108	-265,146	7.7
	1986	1,556,594	-101,554	229,328	-330,882	6.8
	1987	1,368,610	-37,607	150,377	-187,984	9.1
	1988	1,216,031	-7,094	145,485	-152,579	8.4
	1989	1,099,590	8,064	124,525	-116,441	8.8
Total (1963-1989)		—	3,365,295	7,377,701	-4,012,406	—
Percent Change		-78.5	--	-75.6	—	—
Southern Louisiana Onshore						
	1963	48,126,622	0	2,087,078	0	23.1
	1964	46,791,437	914,862	2,250,047	-1,335,185	20.8
	1965	46,674,930	2,283,000	2,399,507	-116,507	19.5
	1966	45,080,005	1,030,378	2,625,303	-1,594,925	17.2
	1967	41,945,173	-443,269	2,691,563	-3,134,832	15.6
	1968	39,509,326	518,956	2,954,603	-2,435,847	13.4
	1969	36,968,231	656,421	3,197,516	-2,541,095	11.6
	1970	32,964,091	-775,971	3,228,169	-4,004,140	10.2
	1971	29,351,594	-465,352	3,147,145	-3,612,497	9.3
	1972	27,051,383	1,145,557	3,445,768	-2,300,211	7.9
	1973	21,182,567	-3,127,949	2,740,867	-5,868,816	7.7
	1974	19,014,294	268,589	2,436,862	-2,168,273	7.8
	1975	16,297,476	-765,911	1,950,907	-2,716,818	8.4
	1976	13,238,160	-1,398,671	1,660,645	-3,059,316	8.0
	1977	10,350,722	-1,399,828	1,487,610	-2,887,438	7.0
	1978	6,791,456	-2,476,380	1,062,886	-3,550,266	6.3
	1979	6,256,936	369,176	903,696	-534,520	6.9
	1980	6,219,172	808,935	846,699	-37,764	7.3
	1981	6,118,337	918,173	1,019,008	-100,835	6.0
	1982	5,625,036	392,469	885,770	-493,301	6.4
	1983	4,926,449	25,886	724,473	-698,587	6.8
	1984	4,542,069	393,195	777,575	-384,380	5.8
	1985	3,659,210	-308,976	573,883	-882,859	6.4
	1986	3,781,353	550,310	428,167	122,143	8.8
	1987	2,994,045	-377,137	410,171	-787,308	7.3
	1988	2,184,550	-477,267	332,228	-809,495	6.6
	1989	1,831,260	-111,093	242,197	-353,290	7.6
Total (1963-1989)		—	-1,851,897	44,443,465	-46,295,362	—
Percent Change		-96.2	—	-1.4	—	—
Southern Louisiana Warranty[f]						
	1981	1,464,489	1,704,742	240,253	1,464,489	6.1
	1982	1,234,976	0	229,513	-229,513	5.4
	1983	1,014,042	0	220,934	-220,934	4.6
	1984	794,166	0	219,876	-219,876	3.6
	1985	617,447	4,666	181,385	-176,719	3.4
	1986	426,718	-2,012	188,717	-190,729	2.3
	1987	269,442	0	157,276	-157,276	1.7
	1988	117,376	0	152,066	-152,066	.8
	1989	0	11,513	126,889	-117,376	0
Total (1963-1989)		—	1,718,909	1,718,909	—	—
Percent Change		-100.0	—	-46.4	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Southern Louisiana Offshore						
	1963	18,421,674	0	636,527	0	28.9
	1964	19,172,021	1,449,097	698,750	750,347	27.4
	1965	22,063,838	3,689,849	798,032	2,891,817	27.6
	1966	24,739,542	3,673,761	998,057	2,675,704	24.8
	1967	27,114,382	3,654,329	1,279,489	2,374,840	21.2
	1968	29,164,927	3,509,170	1,458,625	2,050,545	20.0
	1969	32,877,264	5,560,614	1,848,277	3,712,337	17.8
	1970	33,835,224	3,322,997	2,365,057	957,960	14.3
	1971	32,092,096	644,579	2,587,707	-1,743,128	12.4
	1972	32,091,226	2,782,814	2,783,684	-870	11.5
	1973	30,501,895	1,427,223	3,016,554	-1,589,331	10.1
	1974	27,062,712	-337,702	3,101,481	-3,439,183	8.7
	1975	22,626,872	-1,124,278	3,311,562	-4,435,840	6.8
	1976	21,706,337	2,524,609	3,445,144	-920,535	6.3
	1977	22,495,549	4,275,104	3,485,892	789,212	6.5
	1978	24,782,835	6,121,384	3,834,098	2,287,286	6.5
	1979	24,745,012	4,083,798	4,121,621	-37,823	6.0
	1980	23,611,756	2,976,415	4,109,671	-1,133,256	5.7
	1981	19,974,360	143,751	3,781,147	-3,637,396	5.3
	1982	19,156,821	2,601,329	3,418,868	-817,539	5.6
	1983	18,074,856	1,797,024	2,876,989	-1,081,965	6.3
	1984	16,741,628	1,992,052	3,325,280	-1,333,228	5.0
	1985	15,433,964	1,284,547	2,592,211	-1,307,664	6.0
	1986	13,805,718	578,614	2,206,860	-1,628,246	6.3
	1987	10,802,195	-1,216,074	1,787,449	-3,003,523	6.0
	1988	8,171,340	-1,033,777	1,597,078	-2,630,855	5.1
	1989	7,354,467	385,160	1,202,033	-816,873	6.1
Total (1963-1989)		—	54,966,389	66,033,596	-11,067,207	—
Percent Change		-60.1	—	88.8	—	—
Maryland						
	1970	3,771	4,011	240	3,771	15.7
	1971	3,271	-282	218	-500	15.0
	1972	3,027	0	244	-244	12.4
	1973	2,716	-9	302	-311	9.0
	1974	2,639	61	138	-77	19.1
	1975	968	-1,575	95	-1,671	10.1
	1976	611	-278	79	-357	7.7
	1977	582	56	85	-29	6.8
	1978	879	395	96	297	9.1
	1979	825	25	79	-54	10.4
	1980	899	145	71	74	12.7
	1981	141,060	140,220	59	140,161	2,390.8
	1982	142,684	1,671	37	1,634	3,856.8
	1983	137,128	-5,535	31	-5,566	4,423.5
	1984	145,479	8,411	60	8,351	2,424.7
	1985	134,643	24,780	35,616	-10,836	3.8
	1986	129,695	-4,926	22	-4,948	5,895.2
	1987	43,549	-86,101	45	-86,146	967.8
	1988	40,210	68,156	71,495	-3,339	6
	1989	41,830	85,396	83,776	1,620	5
Total (1963-1989)		—	234,621	192,791	41,830	—
Percent Change		1,009.3	—	34,808.7	—	—
Massachusetts						
	1987	0	15,547	15,547	0	0
	1988	0	16,523	16,523	0	0
	1989	0	18,255	18,255	0	0
Total (1963-1989)		—	50,325	50,325	—	—
Percent Change		—	—	17.4	—	—
Michigan						
	1962	201,262	201,262	0	201,262	0
	1963	156,871	-44,391	0	-44,391	0
	1964	168,989	12,118	0	12,118	0
	1965	158,644	-10,345	0	-10,345	0
	1966	153,690	-4,954	0	-4,954	0
	1967	152,754	780	1,716	-936	89.0
	1968	140,245	-5,659	6,850	-12,509	20.5
	1969	114,111	-10,138	15,996	-26,134	7.1
Total (1963-1989)		—	138,673	24,562	114,111	—
Percent Change		-43.3	—	—	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Minnesota						
	1964	0	3,335	3,335	0	0.0
Total (1963-1989)		—	3,335	3,335	—	—
Percent Change		—	—	-100.0	—	—
Mississippi						
	1963	1,914,258	0	157,426	0	12.2
	1964	1,786,481	15,475	143,252	-127,777	12.5
	1965	1,227,967	-429,155	129,359	-558,514	9.5
	1966	1,298,576	204,700	134,091	70,609	9.7
	1967	1,239,900	60,025	118,701	-58,676	10.4
	1968	1,099,883	-11,810	128,207	-140,017	8.6
	1969	1,000,511	25,179	124,551	-99,372	8.0
	1970	828,217	-56,210	116,084	-172,294	7.1
	1971	692,896	-33,699	101,622	-135,321	6.8
	1972	514,097	-102,520	76,279	-178,799	6.7
	1973	437,457	-3,945	72,695	-76,640	6.0
	1974	303,511	-69,895	64,051	-133,946	4.7
	1975	272,866	14,334	44,979	-30,645	6.1
	1976	229,333	81	43,614	-43,533	5.3
	1977	296,402	126,448	59,379	67,069	5.0
	1978	625,273	390,361	61,490	328,871	10.2
	1979	740,686	219,103	103,690	115,413	7.1
	1980	807,922	179,069	111,833	67,236	7.2
	1981	803,926	121,092	125,086	-3,994	6.4
	1982	1,052,462	372,120	123,586	248,534	8.5
	1983	911,426	-5,978	135,058	-141,036	6.7
	1984	743,691	-25,226	142,509	-167,735	5.2
	1985	544,877	-49,830	108,984	-158,814	5.0
	1986	514,494	79,844	110,227	-30,383	4.7
	1987	495,782	117,595	136,307	-18,712	3.6
	1988	413,975	52,947	134,754	-81,807	3.1
	1989	320,137	16,899	110,737	-93,838	2.9
Total (1963-1989)		—	1,167,004	-2,761,125	-1,594,121	—
Percent Change		-83.3	—	-29.7	—	—
Missouri						
	1989	13,258	22,841	9,583	13,258	1.4
Total (1963-1989)		—	22,841	9,583	13,258	—
Percent Change		—	—	—	—	—
Montana						
	1963	209,731	0	4,583	0	45.8
	1964	215,928	11,016	4,819	6,197	44.8
	1965	234,251	23,357	5,034	18,323	46.5
	1966	241,337	11,707	4,621	7,086	52.2
	1967	248,832	11,447	3,952	7,495	63.0
	1968	302,851	57,943	3,924	54,019	77.2
	1969	305,464	11,401	8,788	2,613	34.8
	1970	298,364	519	7,619	-7,100	39.2
	1971	280,690	-13,308	3,766	-17,674	74.5
	1972	816,075	544,111	8,726	535,385	93.5
	1973	785,860	-14,502	15,713	-30,215	50.0
	1974	832,798	76,660	29,722	46,938	28.0
	1975	828,878	21,633	25,553	-3,920	32.4
	1976	797,800	-4,477	26,601	-31,078	30.0
	1977	704,316	-70,050	23,432	-93,482	30.1
	1978	901,994	220,866	23,190	197,676	38.9
	1979	923,985	58,899	36,908	21,991	25.0
	1980	757,417	-136,110	30,458	-166,568	24.9
	1981	763,171	39,455	33,701	5,754	22.6
	1982	723,238	-8,091	31,842	-39,933	22.7
	1983	686,411	-5,169	31,658	-36,827	21.7
	1984	675,055	12,995	24,351	-11,356	27.7
	1985	608,416	-48,618	18,021	-66,639	33.8
	1986	648,104	59,839	20,151	39,688	32.2
	1987	481,372	-151,701	15,031	-166,732	32.0
	1988	447,594	-12,795	20,960	-33,776	21.3
	1989	439,489	13,973	22,078	-8,105	19.9
Total (1963-1989)		—	710,397	480,639	229,756	—
Percent Change		109.5	—	381.7	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Nebraska						
	1963	66,136	0	9,040	0	7.3
	1964	60,200	1,535	7,471	-5,936	8.1
	1965	58,950	6,080	7,330	-1,250	8.0
	1966	82,550	31,650	8,050	23,600	10.3
	1967	77,039	1,878	7,389	-5,511	10.4
	1968	69,893	-237	6,909	-7,146	10.1
	1969	56,081	-5,767	6,045	-11,812	9.6
	1970	54,293	1,966	5,754	-3,788	9.4
	1971	54,789	5,428	4,932	496	11.1
	1972	64,903	15,044	4,930	10,114	13.2
	1973	67,830	7,716	4,789	2,927	14.2
	1974	76,643	13,484	4,671	8,813	16.4
	1975	74,375	1,555	3,823	-2,268	19.5
	1976	66,889	-3,657	3,829	-7,486	17.5
	1977	70,535	9,012	5,366	3,646	13.1
	1978	79,538	12,568	3,565	9,003	22.3
	1979	87,650	11,757	3,645	8,112	24.0
	1980	91,065	6,737	3,322	3,415	27.4
	1981	97,454	9,950	3,561	6,389	27.4
	1982	85,561	-8,949	2,944	-11,893	29.1
	1983	83,027	470	3,004	-2,534	27.6
	1984	91,353	11,873	3,547	8,326	25.8
	1985	91,149	787	991	-204	92.0
	1986	94,263	3,884	770	3,114	122.4
	1987	89,904	-3,798	561	-4,359	160.3
	1988	89,574	71	401	-330	223.4
	1989	87,641	-1,613	320	-1,933	273.9
Total (1963-1989)		—	129,424	107,919	21,505	—
Percent Change		32.5	—	-96.5	—	—
New Mexico						
	1963	19,517,863	0	614,152	0	31.8
	1964	19,190,056	355,162	682,989	-327,807	28.1
	1965	19,951,935	1,487,556	725,678	761,880	27.5
	1966	20,052,828	903,660	802,768	100,892	25.0
	1967	19,342,751	124,229	834,306	-710,077	23.2
	1968	18,919,609	514,187	937,329	-423,142	20.2
	1969	18,146,139	134,596	908,066	-773,470	20.0
	1970	17,308,112	68,253	926,280	-838,027	18.7
	1971	16,529,510	189,141	957,743	-778,602	17.1
	1972	15,997,299	497,052	1,029,253	-532,211	15.5
	1973	15,363,261	381,980	1,016,018	-634,038	15.1
	1974	14,475,058	134,787	1,022,990	-888,203	14.1
	1975	13,884,786	394,221	984,493	-590,272	14.1
	1976	13,354,680	457,297	987,403	-530,106	13.5
	1977	12,433,347	-9,447	911,886	-921,333	13.6
	1978	13,320,812	1,842,384	954,919	887,465	13.9
	1979	14,997,264	2,646,288	959,836	1,676,452	15.5
	1980	14,805,420	744,461	936,305	-191,844	15.8
	1981	15,296,716	1,494,459	1,003,163	491,296	15.2
	1982	14,806,070	316,078	806,724	-490,646	18.4
	1983	14,298,086	205,175	713,159	-507,984	20.0
	1984	13,759,477	197,607	736,216	-538,609	18.7
	1985	13,405,856	386,088	739,709	-353,621	18.1
	1986	13,157,863	235,946	483,939	-247,993	27.2
	1987	11,796,116	-833,310	528,437	-1,361,747	22.3
	1988	7,278,832	-4,203,244	314,040	-4,517,284	23.2
	1989	2,898,465	-4,158,502	221,865	-4,380,367	13.1
Total (1963-1989)		—	4,526,126	21,145,524	-16,619,398	—
Percent Change		-85.1	—	-63.9	—	—
New Mexico San Juan Basin						
	1963	13,997,350	0	301,770	0	46.4
	1964	13,871,871	229,661	356,140	-125,279	39.0
	1965	13,892,254	420,628	400,045	20,583	34.7
	1966	13,872,853	424,557	443,958	-19,401	31.2
	1967	13,581,350	178,452	469,955	-291,503	28.9
	1968	13,249,352	188,431	520,429	-331,998	25.5
	1969	12,866,976	111,614	473,990	-382,376	27.2
	1970	12,266,900	-151,176	468,300	-620,076	26.2
	1971	11,591,500	-160,400	495,000	-675,400	23.4
	1972	11,582,500	523,600	532,600	-9,000	21.7
	1973	11,303,775	208,334	487,059	-278,725	23.2
	1974	10,545,647	-278,486	479,642	-758,128	22.0
	1975	9,832,030	-285,550	428,067	-713,617	23.0

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
New Mexico San Juan Basin						
	1976	10,152,752	787,212	466,490	320,722	21.8
	1977	9,305,892	-414,343	432,517	-846,860	21.5
	1978	10,024,879	1,195,012	476,025	718,987	21.1
	1979	11,800,229	2,270,115	494,765	1,775,350	23.9
	1980	11,700,459	404,405	504,175	-99,770	23.2
	1981	11,687,319	491,983	505,123	-13,140	23.1
	1982	11,469,966	163,635	380,988	-217,353	30.1
	1983	11,139,052	-496	330,418	-330,914	33.7
	1984	10,702,241	-89,632	347,179	-436,811	30.8
	1985	10,434,121	118,815	386,935	-268,120	27.0
	1986	10,335,239	115,521	214,403	-98,882	48.2
	1987	9,581,706	-453,141	300,392	-753,533	31.9
	1988	6,043,982	-3,364,501	173,223	-3,537,724	34.9
	1989	2,086,583	-3,862,234	95,165	-3,957,399	21.9
Total (1963-1989)		--	-1,247,784	10,663,583	-11,911,367	--
Percent Change		-85.1	--	-68.5	--	--
New Mexico Permian Basin						
	1963	5,519,913	0	312,382	0	17.7
	1964	5,318,385	125,321	326,849	-201,528	16.3
	1965	6,059,682	1,066,930	325,633	741,297	18.6
	1966	6,179,975	479,103	358,810	120,293	17.2
	1967	5,761,401	-54,223	364,351	-418,574	15.8
	1968	5,670,257	325,756	416,900	-91,144	13.6
	1969	5,259,163	22,982	434,076	-411,094	12.1
	1970	5,041,212	239,429	457,380	-217,951	11.0
	1971	4,938,010	369,541	472,743	-103,202	10.4
	1972	4,414,799	-26,548	496,663	-523,211	8.9
	1973	4,059,486	173,646	528,959	-355,313	7.7
	1974	3,929,411	413,273	543,348	-130,075	7.2
	1975	4,052,756	679,771	556,426	123,345	7.3
	1976	3,201,928	-329,915	520,913	-850,828	6.1
	1977	3,127,455	404,896	479,369	-74,473	6.5
	1978	3,295,933	647,372	478,894	168,478	6.9
	1979	3,197,035	376,173	475,071	-98,898	6.7
	1980	3,104,961	340,056	432,130	-92,074	7.2
	1981	3,609,397	1,002,476	498,040	504,436	7.2
	1982	3,336,104	152,443	425,736	-273,293	7.8
	1983	3,159,034	205,671	382,741	-177,070	8.3
	1984	3,057,236	287,239	389,037	-101,798	7.9
	1985	2,971,735	257,273	352,774	-85,501	8.4
	1986	2,822,624	120,425	269,536	-149,111	10.5
	1987	2,214,410	-380,169	228,045	-608,214	9.7
	1988	1,234,850	-838,743	140,817	-979,560	8.8
	1989	811,882	-296,268	126,700	-422,968	6.4
Total (1963-1989)		--	5,773,910	10,481,941	-4,708,031	--
Percent Change		-85.3	--	-59.4	--	--
New York						
	1963	9,772	0	1,136	0	8.6
	1964	4,979	-3,737	1,056	-4,793	4.7
	1965	4,478	833	1,334	-501	3.4
	1966	4,625	1,053	906	147	5.1
	1967	3,947	-10	668	-678	5.9
	1968	3,671	287	563	-276	6.5
	1969	3,070	54	655	-601	4.7
	1970	4,084	1,626	612	1,014	6.7
	1971	3,391	-89	604	-693	5.6
	1972	22,833	21,131	1,689	19,442	13.5
	1973	16,281	-4,508	2,044	-6,552	8.0
	1974	27,166	13,526	2,641	10,885	10.3
	1975	29,940	6,773	3,999	2,774	7.5
	1976	33,516	6,705	3,129	3,576	10.7
	1977	25,716	-5,700	2,100	-7,800	12.2
	1978	21,970	-1,934	1,812	-3,746	12.1
	1979	24,465	7,880	5,385	2,495	4.5
	1980	37,077	15,341	2,729	12,612	13.6
	1981	69,940	41,469	8,606	32,863	8.1
	1982	107,155	45,382	8,167	37,215	13.1
	1983	195,241	97,273	9,187	88,086	21.3
	1984	193,062	12,189	14,368	-2,179	13.4
	1985	201,565	48,624	40,121	8,503	5.0
	1986	218,656	48,388	31,295	17,093	7.0
	1987	208,436	26,535	36,757	-10,222	5.7
	1988	169,239	-12,552	26,645	-39,197	6.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
New York						
	1989	143,112	8,619	34,746	-26,127	4.1
Total (1963-1989)		--	375,158	241,818	133,340	--
Percent Change		1,364.5	--	2,958.6	--	--
North Dakota						
	1963	545,064	0	19,694	0	27.7
	1964	524,295	0	20,769	-20,769	25.2
	1965	464,064	-40,571	19,660	-60,231	23.6
	1966	443,705	0	20,359	-20,359	21.8
	1967	423,900	1	19,806	-19,805	21.4
	1968	264,393	-140,823	18,684	-159,507	14.2
	1969	247,596	936	17,733	-16,797	14.0
	1970	213,159	-17,404	17,033	-34,437	12.5
	1971	193,496	-4,590	15,073	-19,663	12.8
	1972	178,107	-4,961	10,428	-15,389	17.1
	1973	261,163	97,267	14,211	83,056	18.4
	1974	252,690	3,060	11,533	-8,473	21.9
	1975	239,120	-1,820	11,750	-13,570	20.4
	1976	226,939	-2,263	9,918	-12,181	22.9
	1977	223,150	7,013	10,802	-3,789	20.7
	1978	230,772	18,825	11,203	7,622	20.6
	1979	219,435	2,831	14,168	-11,337	15.5
	1980	309,369	109,037	19,103	89,934	16.2
	1981	293,944	6,965	22,390	-15,425	13.1
	1982	291,490	23,542	25,996	-2,454	11.2
	1983	236,101	-22,555	32,834	-55,389	7.2
	1984	231,981	14,147	18,267	-4,120	12.7
	1985	279,356	69,022	21,647	47,375	12.9
	1986	287,913	29,767	21,210	8,557	13.6
	1987	138,327	-132,852	16,734	-149,586	8.3
	1988	45,520	-76,632	16,175	-92,807	2.8
	1989	35,207	2,149	12,462	-10,313	2.8
Total (1963-1989)		--	-59,909	449,948	-509,857	--
Percent Change		-93.5	--	-36.7	--	--
Ohio						
	1963	131,958	0	22,815	0	5.8
	1964	103,271	-7,693	21,004	-28,697	4.9
	1965	89,145	6,782	20,908	-14,126	4.3
	1966	80,323	13,220	22,042	-8,822	3.6
	1967	72,024	11,540	19,839	-8,299	3.6
	1968	95,334	43,079	18,769	24,310	5.1
	1969	109,648	39,592	26,278	13,314	4.2
	1970	156,179	76,767	30,236	46,531	5.2
	1971	157,926	31,384	29,637	1,747	5.3
	1972	174,394	46,311	29,843	16,468	5.8
	1973	201,255	55,761	28,900	26,861	7.0
	1974	215,228	43,199	29,226	13,973	7.4
	1975	196,010	7,446	26,664	-19,218	7.4
	1976	168,636	-1,830	25,544	-27,374	6.6
	1977	147,133	3,056	24,559	-21,503	6.0
	1978	142,472	18,758	23,419	-4,661	6.1
	1979	148,271	30,921	25,122	5,799	5.9
	1980	194,231	80,990	35,030	45,960	5.5
	1981	220,481	67,428	41,178	26,250	5.4
	1982	362,612	191,895	49,764	142,131	7.3
	1983	400,079	95,120	57,653	37,467	6.9
	1984	401,352	55,040	53,767	1,273	7.5
	1985	319,312	-8,177	73,863	-82,040	4.3
	1986	377,925	87,012	28,399	58,613	13.3
	1987	380,257	22,287	19,955	2,332	19.1
	1988	293,096	-70,413	16,748	-87,161	17.5
	1989	235,719	-45,444	11,933	-57,377	19.8
Total (1963-1989)		--	894,031	790,260	103,751	--
Percent Change		78.6	--	-47.7	--	--
Oklahoma						
	1963	13,807,458	0	692,612	0	19.9
	1964	14,154,497	1,152,836	806,297	346,539	17.6
	1965	14,273,119	973,673	855,051	118,622	16.7
	1966	14,851,336	1,538,041	959,824	578,217	15.5
	1967	15,105,087	1,285,640	1,031,889	253,751	14.6
	1968	15,072,880	1,065,536	1,097,743	-32,207	13.7

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Oklahoma						
	1969	14,580,628	707,404	1,199,656	-492,252	12.2
	1970	14,022,418	692,154	1,250,364	-558,210	11.2
	1971	12,682,297	-129,632	1,210,489	-1,340,121	10.5
	1972	11,498,788	2,917	1,186,426	-1,183,509	9.7
	1973	10,359,298	-35,432	1,104,058	-1,139,490	9.4
	1974	9,388,829	107,037	1,077,506	-970,469	8.7
	1975	8,510,250	113,909	992,488	-878,579	8.6
	1976	7,889,565	298,957	919,642	-620,685	8.6
	1977	7,390,731	367,144	865,978	-498,834	8.5
	1978	7,796,285	1,263,118	857,564	405,554	9.1
	1979	8,207,915	1,356,252	944,622	411,630	8.7
	1980	9,125,085	1,871,008	953,838	917,170	9.6
	1981	8,577,060	453,113	1,001,138	-548,025	8.6
	1982	10,230,428	2,771,389	1,118,021	1,653,368	9.2
	1983	9,777,234	434,919	888,113	-453,194	11.0
	1984	9,233,423	442,557	986,368	-543,811	9.4
	1985	8,535,118	126,561	824,866	-698,305	10.3
	1986	7,688,206	-155,382	691,530	-846,912	11.1
	1987	6,396,899	-711,925	579,382	-1,291,307	11.0
	1988	4,779,706	-1,105,196	511,997	-1,617,193	9.3
	1989	3,950,362	-368,780	460,564	-829,344	8.6
Total (1963-1989)		—	14,517,818	24,375,414	-9,857,596	—
Percent Change		-71.4	—	-33.5	—	—
Pennsylvania						
	1963	609,800	0	48,890	0	12.5
	1964	582,136	13,284	40,948	-27,664	14.2
	1965	607,753	64,395	38,778	25,617	15.7
	1966	603,948	39,793	43,598	-3,805	13.9
	1967	566,853	7,771	44,866	-37,095	12.6
	1968	379,842	-147,107	39,904	-187,011	9.5
	1969	344,087	508	36,263	-35,755	9.5
	1970	327,220	18,942	35,809	-16,867	9.1
	1971	343,509	47,472	31,183	16,289	11.0
	1972	326,747	16,974	33,736	-16,762	9.7
	1973	353,144	70,912	34,515	36,397	10.5
	1974	364,107	37,200	36,237	963	10.0
	1975	384,814	54,622	33,915	20,707	11.3
	1976	396,715	46,227	34,326	11,901	11.6
	1977	426,408	56,308	28,615	29,693	14.9
	1978	433,449	39,174	32,133	7,041	13.5
	1979	468,244	63,832	29,037	34,795	16.1
	1980	590,176	163,780	41,848	121,932	14.1
	1981	823,579	295,615	62,212	233,403	13.2
	1982	967,329	216,403	72,653	143,750	13.3
	1983	985,277	83,540	65,592	17,948	15.0
	1984	964,914	47,350	67,713	-20,363	14.3
	1985	909,153	13,399	69,160	-55,761	13.1
	1986	934,124	82,866	57,897	24,971	16.1
	1987	978,336	96,347	52,135	44,212	18.8
	1988	888,883	-41,042	48,411	-89,453	18.4
	1989	778,794	-67,505	42,584	-110,089	18.3
Total (1963-1989)		—	1,323,062	1,154,068	168,994	—
Percent Change		27.7	—	-12.9	—	—
South Dakota						
	1978	6,000	6,000	0	6,000	0
	1979	7,758	2,600	842	1,758	9.2
	1980	8,490	1,850	1,118	732	7.6
	1981	15,420	8,098	1,168	6,930	13.2
	1982	14,952	1,394	1,862	-468	8.0
	1983	13,651	2	1,303	-1,301	10.5
	1984	11,637	-1,197	817	-2,014	14.2
	1985	10,062	-626	929	-1,555	10.9
	1986	9,162	-244	676	-920	13.6
	1987	6,969	-1,692	501	-2,193	13.9
	1988	3,607	-2,817	545	-3,362	6.6
	1989	2,293	-765	549	-1,314	4.2
Total (1963-1989)		—	12,603	10,310	2,293	—
Percent Change		-61.8	—	—	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Tennessee						
	1968	250	252	2	250	125.0
	1969	10	-237	3	-240	3.3
	1970	10	0	0	0	0
	1973	1,615	1,605	0	1,605	0
	1974	2,497	882	0	882	0
	1975	2,497	0	0	0	0
	1976	2,497	0	0	0	0
	1981	26	-2,439	32	-2,471	8
	1982	8,878	9,136	284	8,852	31.3
	1983	7,648	2,583	3,813	-1,230	2.0
	1984	5,415	1,804	4,037	-2,233	1.3
	1985	11,800	10,462	4,077	6,385	2.9
	1986	8,734	0	3,066	-3,066	2.8
	1987	18,925	13,166	2,995	10,191	6.3
	1988	16,270	0	2,655	-2,655	6.1
	1989	14,091	35	2,214	-2,179	6.4
Total (1963-1989)		--	37,269	23,178	14,091	--
Percent Change		5,536.4	--	110,600.0	--	--
Texas						
	1963	52,668,983	0	3,222,919	0	16.3
	1964	53,651,366	4,358,367	3,375,984	982,383	15.9
	1965	53,503,297	3,288,494	3,436,563	-148,069	15.6
	1966	55,184,451	5,205,077	3,523,923	1,681,154	15.7
	1967	56,470,413	4,800,784	3,514,822	1,285,962	16.1
	1968	55,010,407	2,150,518	3,610,524	-1,460,006	15.2
	1969	49,067,574	-2,213,970	3,728,863	-5,942,833	13.2
	1970	41,361,659	-3,821,924	3,883,991	-7,705,915	10.6
	1971	37,990,952	425,130	3,795,837	-3,370,707	10.0
	1972	32,637,487	-1,619,684	3,733,781	-5,353,465	8.7
	1973	28,651,862	-409,068	3,576,557	-3,985,625	8.0
	1974	25,139,850	-164,180	3,347,832	-3,512,012	7.5
	1975	20,360,237	-1,819,122	2,960,491	-4,779,613	6.9
	1976	17,567,503	-161,163	2,631,571	-2,792,734	6.7
	1977	16,127,735	979,002	2,418,770	-1,439,768	6.7
	1978	17,255,431	3,412,507	2,284,811	1,127,696	7.6
	1979	17,977,739	3,472,299	2,749,991	722,308	6.5
	1980	17,409,917	2,313,909	2,881,731	-567,822	6.0
	1981	18,573,606	4,177,514	3,013,825	1,163,689	6.2
	1982	17,387,220	1,537,466	2,723,854	-1,186,386	6.4
	1983	16,723,718	1,750,991	2,414,493	-663,502	6.9
	1984	15,968,545	1,800,706	2,555,879	-755,173	6.2
	1985	15,538,082	1,666,205	2,096,668	-430,463	7.4
	1986	14,510,512	858,804	1,886,374	-1,027,570	7.7
	1987	11,859,135	-1,003,058	1,648,319	-2,651,377	7.2
	1988	8,073,055	-2,324,185	1,461,895	-3,786,080	5.5
	1989	6,325,361	-490,187	1,257,507	-1,747,694	5.0
Total (1963-1989)		--	28,171,234	74,514,856	-46,343,622	--
Percent Change		-88.0	--	-61.0	--	--
Texas Railroad District No. 1 (North)						
	1963	63,381	0	3,869	0	16.4
	1964	54,662	-3,640	5,079	-8,719	10.8
	1965	56,138	5,238	3,762	1,476	14.9
	1966	52,619	-141	3,378	-3,519	15.6
	1967	49,253	-503	2,863	-3,366	17.2
	1968	45,572	-715	2,966	-3,681	15.4
	1969	44,199	1,685	3,058	-1,373	14.5
	1970	40,777	-11	3,411	-3,422	12.0
	1971	39,070	2,573	4,280	-1,707	9.1
	1972	39,623	3,364	2,811	553	14.1
	1973	36,141	313	3,795	-3,482	9.5
	1974	45,495	13,157	3,603	9,354	12.0
	1975	41,021	-332	4,142	-4,474	9.9
	1976	37,043	-240	3,738	-3,978	9.9
	1977	34,204	478	3,317	-2,839	10.3
	1978	36,595	5,709	3,318	2,391	11.0
	1979	39,851	6,254	2,998	3,256	13.3
	1980	16,159	-19,911	3,781	-23,692	4.3
	1981	32,780	23,236	6,615	16,621	5.0
	1982	32,151	3,124	3,753	-629	8.6
	1983	28,344	-2,370	1,437	-3,807	19.7
	1984	27,769	875	1,450	-575	19.2
	1985	17,024	-9,584	1,161	-10,745	14.7
	1986	16,208	243	1,059	-816	15.3

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 1 (North)						
	1987	2,847	-13,118	243	-13,361	11.7
	1988	2,330	-317	200	-517	11.7
	1989	1,451	-642	237	-879	6.1
Total (1963-1989)		--	14,725	76,655	-61,930	--
Percent Change		-97.7	--	-93.9	--	--
Texas Railroad District No. 1 (South)						
	1963	1,685,227	0	68,838	0	24.5
	1964	1,580,749	-35,962	68,516	-104,478	23.1
	1965	588,192	-931,344	61,213	-992,557	9.6
	1966	541,094	11,795	58,893	-47,098	9.2
	1967	503,339	9,543	47,298	-37,755	10.6
	1968	405,252	-58,695	39,392	-98,087	10.3
	1969	337,857	-34,624	32,771	-67,395	10.3
	1970	278,516	-23,399	35,942	-59,341	7.7
	1971	166,831	-77,589	34,096	-111,685	4.9
	1972	134,839	-2,238	29,754	-31,992	4.5
	1973	181,110	78,509	32,238	46,271	5.6
	1974	162,894	27,514	45,730	-18,216	3.6
	1975	145,024	19,340	37,210	-17,870	3.9
	1976	143,572	35,165	36,617	-1,452	3.9
	1977	130,993	23,577	36,156	-12,579	3.6
	1978	130,948	35,425	35,470	-45	3.7
	1979	148,979	47,794	29,763	18,031	5.0
	1980	121,388	1,696	29,287	-27,591	4.1
	1981	168,163	74,056	27,281	46,775	6.2
	1982	133,668	-5,596	28,899	-34,495	4.6
	1983	97,765	-11,272	24,631	-35,903	4.0
	1984	99,745	27,246	25,266	1,980	3.9
	1985	95,611	18,042	22,176	-4,134	4.3
	1986	116,302	36,726	16,037	20,691	7.3
	1987	75,864	-20,132	20,306	-40,438	3.7
	1988	113,096	66,348	29,116	37,232	3.9
	1989	228,920	149,667	33,843	115,824	6.8
Total (1963-1989)		--	-538,406	917,901	-1,456,307	--
Percent Change		-86.4	--	-50.8	--	--
Texas Railroad District No. 2						
	1963	4,864,112	0	330,667	0	14.7
	1964	4,584,487	62,552	342,177	-279,625	13.4
	1965	4,076,858	-180,279	327,350	-507,629	12.5
	1966	3,466,305	-298,702	311,851	-610,553	11.1
	1967	2,841,291	-360,124	264,890	-625,014	10.7
	1968	2,496,730	-99,472	245,089	-344,561	10.2
	1969	2,075,879	-186,320	232,531	-420,851	8.9
	1970	1,715,090	-196,748	194,041	-360,789	8.8
	1971	1,454,790	-76,816	183,484	-260,300	7.9
	1972	1,303,237	24,532	176,085	-151,553	7.4
	1973	1,110,733	-29,939	162,565	-192,504	6.8
	1974	898,492	-59,631	152,610	-212,241	5.9
	1975	677,975	-101,824	119,093	-220,917	5.7
	1976	573,164	3,847	108,258	-104,411	5.3
	1977	550,595	72,331	94,900	-22,569	5.8
	1978	578,619	112,842	84,818	28,024	6.8
	1979	716,626	226,283	88,276	138,007	8.1
	1980	661,009	50,105	105,722	-55,617	6.3
	1981	553,979	-2,762	104,268	-107,030	5.3
	1982	826,401	411,231	138,809	272,422	6.0
	1983	753,625	82,006	154,782	-72,776	4.9
	1984	704,025	157,586	207,186	-49,600	3.4
	1985	584,282	19,915	139,658	-119,743	4.2
	1986	410,993	-104,368	68,921	-173,289	6.0
	1987	365,766	29,779	75,006	-45,227	4.9
	1988	292,531	-21,456	51,779	-73,235	5.6
	1989	394,569	293,551	191,513	102,038	2.1
Total (1963-1989)		--	-143,881	4,325,662	-4,469,543	--
Percent Change		-91.9	--	-42.1	--	--
Texas Railroad District No. 3						
	1963	5,078,311	0	387,472	0	13.1
	1964	4,977,012	280,602	381,901	-101,299	13.0
	1965	4,505,727	-79,387	392,898	-471,285	11.5
	1966	4,083,560	-29,797	392,370	-422,167	10.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Ye.. -End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 3						
	1967	3,711,985	-2,806	368,769	-371,575	10.1
	1968	2,765,198	-586,301	360,486	-946,787	7.7
	1969	2,403,337	-24,434	337,427	-361,861	7.1
	1970	1,981,142	-108,115	314,080	-422,195	6.3
	1971	1,671,560	-46,353	263,229	-309,582	6.4
	1972	1,173,380	-218,758	279,422	-498,180	4.2
	1973	987,425	3,890	189,845	-185,955	5.2
	1974	892,577	56,488	151,336	-94,848	5.9
	1975	767,343	8,565	133,799	-125,234	5.7
	1976	587,611	-52,635	127,097	-179,732	4.6
	1977	475,89[illegible]	-11,676	100,042	-111,718	4.8
	1978	542,9[illegible]	148,901	81,894	67,007	6.6
	1979	588,4[illegible]	171,902	126,361	45,521	4.7
	1980	539,0[illegible]	42,920	92,335	-49,415	5.8
	1981	574,5[illegible]	161,432	125,889	35,543	4.6
	1982	486,27[illegible]	16,283	104,558	-88,275	4.7
	1983	418,175	13,855	81,954	-68,099	5.1
	1984	327,633	-23,499	67,043	-90,542	4.9
	1985	457,86[illegible]	209,443	79,208	130,235	5.8
	1986	451,948	47,760	53,680	-5,920	8.4
	1987	229,798	-176,674	45,476	-222,150	5.1
	1988	154,176	-41,158	34,464	-75,622	4.5
	1989	127,410	-2,217	24,549	-26,766	5.2
Total (1963-1989)		—	-240,769	4,710,132	-4,950,901	—
Percent Change		-97.5	—	-93.7	—	—
Texas Railroad District No. 4						
	1963	11,212,220	0	652,194	0	17.2
	1964	11,878,975	1,343,910	677,155	666,755	17.5
	1965	12,556,777	1,398,834	721,032	677,802	17.4
	1966	11,606,704	-195,249	754,824	-950,073	15.4
	1967	12,470,267	1,645,773	782,210	863,563	15.9
	1968	11,459,632	-212,318	798,317	-1,010,635	14.4
	1969	10,140,480	-521,612	797,540	-1,319,152	12.7
	1970	8,493,310	-826,647	820,523	-1,647,170	10.4
	1971	7,802,139	111,923	803,094	-691,171	9.7
	1972	6,284,407	-763,031	754,701	-1,517,732	8.3
	1973	5,850,371	269,928	703,964	-434,036	8.3
	1974	4,921,859	-309,209	619,303	-928,512	7.9
	1975	3,638,375	-603,868	479,616	-1,283,484	7.6
	1976	3,028,432	-200,661	409,282	-609,943	7.4
	1977	2,398,730	-258,942	370,760	-629,702	6.5
	1978	2,392,194	285,213	291,749	-6,536	8.2
	1979	2,302,138	222,881	312,937	-90,056	7.4
	1980	2,344,940	340,609	297,807	42,802	7.9
	1981	2,370,791	503,024	477,173	25,851	5.0
	1982	1,973,087	-120,979	276,725	-397,704	7.1
	1983	1,750,306	30,670	253,451	-222,781	6.9
	1984	1,640,337	168,568	278,537	-109,969	5.9
	1985	1,330,192	-110,632	199,513	-310,145	6.7
	1986	1,139,345	29,454	220,301	-190,847	5.2
	1987	952,396	-11,230	175,719	-186,949	5.4
	1988	669,620	-113,936	168,840	-282,776	4.0
	1989	653,649	121,795	137,766	-15,971	4.7
Total (1963-1989)		—	2,024,268	12,582,839	-10,558,571	—
Percent Change		-94.2	—	-78.9	—	—
Texas Railroad District No. 5						
	1963	34,202	0	2,133	0	16.0
	1964	33,221	556	1,537	-981	21.6
	1965	32,721	784	1,284	-500	25.5
	1966	31,558	232	1,395	-1,163	22.6
	1967	22,518	-7,597	1,443	-9,040	15.6
	1968	26,395	5,496	1,619	3,877	16.3
	1969	8,968	-15,761	1,666	-17,427	5.4
	1970	6,707	17	2,278	-2,261	2.9
	1971	38,535	34,329	2,501	31,828	15.4
	1972	35,196	-27	3,312	-3,339	10.6
	1973	31,322	-137	3,737	-3,574	8.4
	1974	27,841	13	3,494	-3,481	8.0
	1975	24,355	-18	3,468	-3,486	7.0
	1976	22,087	394	2,662	-2,268	8.3
	1977	20,133	40	1,994	-1,954	10.1
	1978	18,582	12	1,563	-1,551	11.9
	1979	14,767	-614	3,201	-3,815	4.6

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Texas Railroad District No. 5						
	1980	13,186	4,197	5,778	-1,581	2.3
	1981	9,273	1,921	5,834	-3,913	1.6
	1982	13,943	10,603	5,933	4,670	2.4
	1983	11,582	2,156	4,517	-2,361	2.6
	1984	7,256	-1,612	2,714	-4,326	2.7
	1985	10,956	6,337	2,637	3,700	4.2
	1986	1,022	-9,512	422	-9,934	2.4
	1987	2,280	1,909	681	1,258	3.3
	1988	1,347	-530	395	-933	3.4
	1989	1,391	530	486	44	2.9
Total (1963-1989)		—	33,740	66,551	-32,811	—
Percent Change		-95.9	—	-77.2	—	—
Texas Railroad District No. 6						
	1963	2,302,290	0	348,576	0	6.6
	1964	2,393,834	402,050	310,506	91,544	7.7
	1965	2,287,227	209,534	316,141	-106,607	7.2
	1966	2,170,335	182,765	299,657	-116,892	7.2
	1967	1,959,620	67,585	278,100	-210,515	7.0
	1968	1,918,234	206,960	248,546	-41,586	7.7
	1969	1,675,753	25,754	216,727	-242,481	7.7
	1970	1,581,055	-102,960	191,182	-294,145	7.2
	1971	1,177,681	-42,852	161,075	-703,927	7.3
	1972	1,056,438	39,036	160,279	-121,243	6.6
	1973	948,767	36,715	144,386	-107,671	6.6
	1974	968,931	149,928	129,764	20,164	7.5
	1975	830,569	-17,369	120,993	-138,362	6.9
	1976	727,440	8,555	111,684	-103,129	6.5
	1977	759,362	138,431	106,509	31,922	7.1
	1978	818,502	173,334	114,194	59,140	7.2
	1979	1,078,940	475,676	215,237	260,441	5.0
	1980	1,317,391	557,641	319,199	238,448	4.1
	1981	1,399,147	277,348	195,592	81,756	7.2
	1982	1,511,970	297,425	184,600	112,823	8.2
	1983	1,507,849	142,306	146,427	-4,121	10.3
	1984	1,521,643	194,434	186,440	13,994	8.1
	1985	1,514,788	148,775	155,830	-7,055	9.7
	1986	1,379,371	-8,929	126,489	-135,417	10.9
	1987	1,302,640	39,527	116,258	-76,731	11.2
	1988	965,946	-225,263	111,431	-336,694	8.7
	1989	760,001	-110,125	95,820	-205,945	7.9
Total (1963-1989)		—	3,214,777	4,757,266	-1,542,269	—
Percent Change		-67.0	—	-72.5	—	—
Texas Railroad District No. 7B						
	1963	46,547	0	7,109	0	6.5
	1964	45,314	5,908	7,141	-1,233	6.3
	1965	39,198	1,540	7,656	-6,116	5.1
	1966	52,435	20,195	6,958	13,237	7.5
	1967	46,429	0	6,809	-6,006	7.7
	1968	43,084	2,486	5,831	-3,345	7.4
	1969	39,537	0	3,547	-3,547	11.1
	1970	44,675	8,017	2,876	5,141	15.5
	1971	34,609	-7,952	2,117	10,069	16.3
	1972	90,366	57,328	2,171	55,157	41.6
	1973	10,401	-78,666	1,299	-79,965	8.0
	1974	5,226	-4,055	1,120	-5,175	4.7
	1975	4,301	131	1,056	-925	4.1
	1976	3,341	1	961	-960	3.5
	1977	4,253	1,572	660	912	6.4
	1978	11,664	5,769	1,358	7,411	8.6
	1979	23,826	14,319	2,157	12,162	11.0
	1980	17,869	-2,183	3,774	-5,957	4.7
	1981	1,424	16,245	200	16,445	7.1
	1982	2,222	1,322	524	798	4.2
	1983	709	1,275	238	1,013	3.0
	1984	551	8	166	-158	3.3
	1985	3,598	3,821	774	3,047	4.6
	1986	76,957	75,135	1,776	73,359	43.3
	1987	59,694	28,953	46,216	-17,263	1.3
	1988	107,491	129,832	81,835	47,797	1.3
	1989	669	-106,744	78	-106,822	8.6
Total (1963-1989)		—	142,617	188,495	-45,878	—
Percent Change		-98.6	—	-98.9	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Texas Railroad District No. 7C						
	1963	2,472,362	0	110,295	0	22.4
	1964	2,857,648	517,049	131,763	385,286	21.7
	1965	2,985,879	262,582	134,351	128,231	22.2
	1966	2,308,580	-546,683	130,615	-677,299	17.7
	1967	2,946,912	785,732	147,400	638,332	20.0
	1968	3,124,124	318,004	140,792	177,212	22.2
	1969	2,703,781	-247,831	172,512	-420,343	15.7
	1970	2,598,989	60,884	165,676	-104,792	15.7
	1971	2,581,063	155,988	173,914	-17,926	14.8
	1972	2,224,834	-184,186	172,043	-356,229	12.9
	1973	1,902,703	-131,885	190,246	-322,131	10.0
	1974	1,688,005	-29,761	184,937	-214,698	9.1
	1975	1,263,312	-266,822	157,871	-424,693	8.0
	1976	1,001,709	-116,137	145,466	-261,603	6.9
	1977	948,468	76,693	129,934	-53,241	7.3
	1978	977,921	151,101	121,648	29,453	8.0
	1979	1,049,200	187,881	116,602	71,279	9.0
	1980	1,140,264	245,739	154,675	91,064	7.4
	1981	1,104,298	111,940	147,906	-35,966	7.5
	1982	1,107,419	132,631	129,510	3,121	8.6
	1983	1,040,536	59,403	126,286	-66,883	8.2
	1984	1,084,896	174,005	129,645	44,360	8.4
	1985	1,119,482	159,062	124,476	34,586	9.0
	1986	964,681	-63,420	91,381	-154,801	10.6
	1987	876,742	4,395	92,334	-87,939	9.5
	1988	329,957	-503,025	43,760	-546,785	7.5
	1989	176,787	-117,095	36,075	-153,170	4.9
Total (1963-1989)		—	1,196,244	3,491,819	-2,295,575	—
Percent Change		-92.9	—	-67.3	—	—
Texas Railroad District No. 8						
	1963	9,307,062	0	433,806	0	21.5
	1964	10,466,423	1,697,182	537,821	1,159,361	19.5
	1965	12,612,665	2,690,437	541,195	2,146,242	23.2
	1966	16,675,277	4,647,381	584,769	4,062,612	28.5
	1967	18,337,218	2,272,559	610,618	1,661,941	30.0
	1968	19,526,445	1,987,392	798,165	1,189,227	24.5
	1969	16,655,299	-1,914,642	956,504	-2,871,146	17.4
	1970	13,160,109	-2,419,893	1,075,297	-3,495,190	12.2
	1971	12,307,312	243,934	1,102,731	-852,797	11.2
	1972	10,636,582	-596,964	1,073,766	-1,670,730	9.9
	1973	9,063,723	-538,353	1,034,506	-1,572,859	8.8
	1974	7,737,050	-375,102	951,571	-1,326,673	8.1
	1975	6,098,158	-744,767	894,125	-1,638,892	6.8
	1976	5,333,500	1,601	766,259	-764,658	7.0
	1977	4,691,436	36,497	678,561	-642,064	6.9
	1978	4,160,889	76,042	606,589	-530,547	6.9
	1979	3,800,865	219,048	579,072	-360,024	6.6
	1980	3,397,492	128,390	531,763	-403,373	6.4
	1981	3,152,297	225,322	470,517	-245,195	6.7
	1982	3,069,367	315,821	398,751	-82,930	7.7
	1983	2,998,872	234,121	304,616	-70,495	9.8
	1984	2,971,901	271,110	298,081	-26,971	10.0
	1985	3,188,313	482,128	265,716	216,412	12.0
	1986	2,818,641	149,479	220,193	-359,672	12.8
	1987	1,985,892	-656,452	176,297	-832,749	11.3
	1988	782,113	-1,113,635	90,144	-1,203,779	8.7
	1989	425,145	-286,047	70,921	-356,968	6.0
Total (1963-1989)		—	6,739,631	15,621,548	-8,881,917	—
Percent Change		-95.4	—	-83.6	—	—
Texas Railroad District No. 8A						
	1963	1,506,890	0	53,062	0	28.4
	1964	1,095,497	-361,208	47,185	-408,393	23.3
	1965	1,047,394	-718	50,385	-51,103	20.8
	1966	1,924,988	943,815	66,221	877,594	29.1
	1967	1,848,157	345	77,176	-76,831	23.9
	1968	1,768,569	5,109	84,697	-79,588	20.9
	1969	1,725,684	42,314	85,199	-42,885	20.3
	1970	1,317,343	-303,809	104,532	-408,341	12.6
	1971	1,047,531	-180,712	89,100	-269,812	11.8
	1972	687,155	-293,010	67,366	-360,376	10.2
	1973	355,474	-273,088	58,593	-331,681	6.1
	1974	285,944	-25,631	43,809	-69,530	6.5
	1975	171,171	-78,676	36,097	-114,773	4.7

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Texas Railroad District No. 8A						
	1976	130,967	-8,239	31,965	-40,204	4.1
	1977	133,215	35,316	33,068	2,248	4.0
	1978	146,323	46,039	32,931	13,108	4.4
	1979	135,502	22,677	33,498	-10,821	4.0
	1980	96,133	-12,949	26,420	-39,369	3.6
	1981	78,265	4,119	21,987	-17,868	3.6
	1982	82,150	21,576	17,691	3,885	4.6
	1983	63,149	-5,242	13,759	-19,001	4.6
	1984	59,228	7,620	11,541	-3,921	5.1
	1985	40,258	-8,951	10,019	-18,970	4.0
	1986	59,040	34,171	15,389	18,782	3.8
	1987	84,844	38,700	12,896	25,804	6.6
	1988	29,688	-51,928	3,228	-55,156	9.2
	1989	3,563	-24,846	1,279	-26,125	2.8
Total (1963-1989)		—	-427,206	1,076,121	-1,503,327	—
Percent Change		-99.8	—	-97.6	—	—
Texas Railroad District No. 9						
	1963	730,680	0	50,049	0	14.6
	1964	856,565	176,470	50,585	125,885	16.9
	1965	842,926	44,562	58,201	-13,639	14.5
	1966	769,617	-9,290	64,019	-73,309	12.0
	1967	772,830	63,740	60,527	3,213	12.8
	1968	731,594	18,640	59,876	-41,236	12.2
	1969	672,513	923	60,004	-59,081	11.2
	1970	609,226	652	63,939	-63,287	9.5
	1971	577,872	30,556	61,910	-31,354	9.3
	1972	524,353	3,808	57,327	-53,519	9.1
	1973	474,048	303	50,608	-50,305	9.4
	1974	383,584	-42,073	48,391	-90,464	7.9
	1975	367,565	31,066	47,085	-16,019	7.8
	1976	328,703	4,263	43,125	-38,862	7.6
	1977	292,597	490	36,596	-36,106	8.0
	1978	258,859	-437	33,301	-33,738	7.8
	1979	276,694	52,342	34,507	17,835	8.0
	1980	286,510	50,076	40,260	9,816	7.1
	1981	280,476	37,849	43,880	-6,034	6.4
	1982	244,544	12,774	48,706	-35,932	5.0
	1983	241,344	41,999	45,199	-3,200	5.3
	1984	231,054	36,975	47,265	-10,290	4.9
	1985	253,709	76,227	53,572	22,655	4.7
	1986	254,398	52,380	51,691	689	4.9
	1987	214,128	-7,350	32,920	-40,270	6.5
	1988	142,371	-40,531	31,226	-71,757	4.6
	1989	146,196	42,216	38,391	3,825	3.8
Total (1963-1989)		—	678,630	1,263,114	-584,484	—
Percent Change		-80.0	—	-23.3	—	—
Texas Railroad District No. 10						
	1963	13,365,699	0	775,047	0	17.2
	1964	12,823,979	272,898	814,618	-541,720	15.7
	1965	11,871,595	-134,289	818,095	-952,384	14.5
	1966	11,501,379	478,756	848,972	-370,216	13.5
	1967	10,960,394	326,537	867,522	-540,985	12.6
	1968	10,699,578	563,932	824,748	-260,816	13.0
	1969	10,483,715	613,104	828,967	-215,863	12.6
	1970	9,639,025	57,251	901,941	-844,690	10.7
	1971	8,839,048	100,981	900,958	-799,977	9.8
	1972	8,101,237	191,027	928,838	-737,811	8.7
	1973	7,307,505	153,244	946,975	-793,731	7.7
	1974	6,805,151	436,466	938,821	-502,355	7.2
	1975	6,104,396	172,023	872,778	-700,755	7.0
	1976	5,456,164	149,091	797,323	-648,232	6.8
	1977	5,019,649	322,805	759,320	-436,515	6.6
	1978	5,189,211	829,516	659,954	169,562	7.9
	1979	4,860,965	332,109	660,355	-328,246	7.4
	1980	4,446,590	214,785	629,160	-414,375	7.1
	1981	5,068,667	1,280,275	658,198	622,077	7.7
	1982	3,843,035	-721,936	503,696	-1,225,632	7.6
	1983	3,622,812	176,213	396,436	-220,223	9.1
	1984	3,304,859	70,932	388,885	-317,953	8.5
	1985	3,026,876	45,284	323,267	-277,983	9.4
	1986	2,858,693	90,396	258,579	-168,183	11.1
	1987	2,390,873	-263,142	204,678	-467,820	11.7
	1988	1,678,385	-534,463	178,025	-712,488	9.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Texas Railroad District No. 10						
	1989	1,384,205	-117,444	176,736	-294,180	7.8
Total (1963-1989)		--	5,106,351	17,087,845	-11,981,494	--
Percent Change		-89.6	--	-77.2	--	--
Texas Offshore						
	1969	100,572	100,982	410	100,572	245.3
	1970	95,139	2,840	8,273	-5,433	11.5
	1971	252,911	171,120	13,348	157,772	18.9
	1972	345,840	118,835	25,906	92,929	13.3
	1973	392,138	100,098	53,800	46,298	7.3
	1974	316,801	-2,284	73,053	-75,337	4.3
	1975	227,072	-36,571	53,158	-89,729	4.3
	1976	193,770	13,832	47,134	-33,302	4.1
	1977	668,207	541,390	66,953	474,437	10.0
	1978	1,992,224	1,540,041	216,024	1,324,017	9.2
	1979	2,940,962	1,493,745	545,007	948,738	5.4
	1980	3,011,980	712,788	641,770	71,018	4.7
	1981	3,779,497	1,495,999	728,482	767,517	5.2
	1982	4,060,989	1,163,191	881,699	281,492	4.6
	1983	4,188,650	988,421	860,760	127,661	4.9
	1984	3,987,448	716,458	917,660	-201,202	4.3
	1985	3,895,125	626,338	718,661	-92,323	5.4
	1986	3,962,913	828,244	760,456	67,788	5.2
	1987	3,315,371	1,747	649,289	-647,542	5.1
	1988	2,804,004	126,085	637,452	-511,367	4.4
	1989	2,021,405	-332,786	449,813	-782,599	4.5
Total (1963-1989)		--	10,370,513	8,349,108	2,021,405	--
Percent Change		1,909.9	--	109,610.5	--	--
Utah						
	1963	321,082	0	40,161	0	8.0
	1964	344,280	54,802	31,604	23,198	10.9
	1965	378,386	65,596	31,490	34,106	12.0
	1966	385,028	39,585	32,943	6,642	11.7
	1967	348,855	-9,714	26,459	-36,173	13.2
	1968	332,613	8,201	24,443	-16,242	13.6
	1969	260,830	-50,962	20,821	-71,783	12.5
	1970	251,661	15,981	25,150	-9,169	10.0
	1971	264,659	34,744	21,746	12,998	12.2
	1972	296,473	53,382	21,568	31,814	13.7
	1973	307,805	35,602	24,270	11,332	12.7
	1974	306,853	27,592	28,544	-952	10.8
	1975	304,929	28,251	30,175	-1,924	10.1
	1976	252,143	-26,245	26,541	-52,786	9.5
	1977	290,901	71,160	32,402	38,758	9.0
	1978	382,198	129,505	38,208	91,297	10.0
	1979	533,170	192,491	41,519	150,972	12.8
	1980	716,243	233,063	49,990	183,073	14.3
	1981	858,299	205,593	63,537	142,056	13.5
	1982	1,001,035	213,591	70,855	142,736	14.1
	1983	932,750	-15,120	53,165	-68,285	17.5
	1984	870,143	-9,854	52,753	-62,607	16.5
	1985	849,903	32,685	52,925	-20,240	16.1
	1986	783,318	-29,351	37,234	-66,585	21.0
	1987	671,906	-81,573	29,839	-111,412	22.5
	1988	500,910	-143,908	27,088	-170,996	18.5
	1989	270,761	-208,439	21,710	-230,149	12.5
Total (1963-1989)		--	866,658	916,979	-50,321	--
Percent Change		-15.7	--	-45.9	--	--
Virginia						
	1963	10,818	0	1,439	0	7.5
	1964	11,995	2,450	1,273	1,177	9.4
	1965	17,300	8,826	3,521	5,305	4.9
	1966	16,135	2,540	3,705	-1,165	4.4
	1967	17,491	4,519	3,163	1,356	5.5
	1968	21,102	6,418	2,807	3,611	7.5
	1969	19,552	611	2,361	-1,550	8.3
	1970	28,088	10,914	2,378	8,536	11.8
	1971	30,893	4,972	2,167	2,805	14.3
	1972	38,633	10,158	2,418	7,740	16.0
	1973	41,858	7,916	4,691	3,225	8.9
	1974	38,523	3,388	6,723	-3,335	5.7

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change In Reserves Gain or Loss	R/P[a] Ratio
Virginia						
	1975	41,014	8,897	6,406	2,491	6.4
	1976	40,993	6,667	6,688	-21	6.1
	1977	44,791	9,310	5,512	3,798	8.1
	1978	91,654	55,405	8,542	46,863	10.7
	1979	107,257	24,190	8,587	15,603	12.5
	1980	108,025	8,586	7,818	768	13.8
	1981	117,658	18,530	8,897	9,633	13.2
	1982	121,518	10,765	6,905	3,860	17.6
	1983	117,841	646	4,323	-3,677	27.3
	1984	112,864	3,999	8,976	-4,977	12.6
	1985	133,931	35,318	14,251	21,067	9.4
	1986	133,954	61,389	61,366	23	2.2
	1987	103,558	54,663	85,059	-30,396	1.2
	1988	145,233	57,667	15,992	41,675	9.1
	1989	128,092	-976	16,165	-17,141	7.9
Total (1963-1989)		—	417,968	300,694	117,274	—
Percent Change		1,084.1	—	1,023.3	—	—
Washington						
	1983	10,585	10,585	0	10,585	0
	1984	12,527	1,942	0	1,942	0
	1985	12,677	150	0	150	0
	1986	13,765	1,088	0	1,088	0
	1987	12,863	-902	0	-902	0
	1988	5,416	-7,447	0	-7,447	0
	1989	6,604	1,188	0	1,188	0
Total (1963-1989)		—	6,604	—	6,604	—
Percent Change		-37.6	—	—	—	—
West Virginia						
	1963	1,904,102	0	163,564	0	11.6
	1964	1,982,145	251,011	172,964	78,043	11.5
	1965	1,937,033	130,640	175,752	-45,112	11.0
	1966	1,985,145	223,450	175,338	48,112	11.3
	1967	1,925,401	119,518	179,262	-59,744	10.7
	1968	1,907,235	180,680	198,846	-18,166	9.6
	1969	1,844,741	126,882	189,376	-62,494	9.7
	1970	1,789,459	152,723	208,005	-55,282	8.6
	1971	1,749,714	161,223	200,968	-39,745	8.7
	1972	1,687,882	112,811	174,643	-61,832	9.7
	1973	1,644,881	107,560	150,561	-43,001	10.9
	1974	1,487,428	-11,610	145,843	-157,453	10.2
	1975	1,423,334	67,054	131,148	-64,094	10.9
	1976	1,478,789	187,832	132,377	55,455	11.2
	1977	1,459,026	110,649	130,412	-19,763	11.2
	1978	1,516,740	191,699	133,985	57,714	11.3
	1979	1,554,046	168,227	130,921	37,306	11.9
	1980	1,614,177	203,190	143,062	60,131	11.3
	1981	1,560,665	103,251	156,763	-53,512	10.0
	1982	1,549,207	136,055	147,513	-11,458	10.5
	1983	1,579,758	159,408	128,857	30,551	12.3
	1984	1,507,008	77,003	149,753	-72,750	10.1
	1985	1,563,159	212,687	156,536	56,151	10.0
	1986	1,661,216	230,657	132,600	98,057	12.5
	1987	1,692,048	153,417	122,585	30,832	13.8
	1988	1,587,118	14,428	119,358	-104,930	13.3
	1989	1,609,044	140,482	118,556	21,926	13.6
Total (1963-1989)		—	3,710,930	4,005,988	-295,058	—
Percent Change		-15.5	—	-27.5	—	—
Wyoming						
	1963	4,191,587	0	154,532	0	27.1
	1964	4,315,618	311,227	187,196	124,031	23.1
	1965	4,398,703	270,816	187,731	83,085	23.4
	1966	4,496,114	282,733	185,322	97,411	24.3
	1967	4,473,545	162,245	184,814	-22,569	24.2
	1968	4,472,316	192,804	194,033	-1,229	23.0
	1969	4,471,936	213,841	214,221	-380	20.9
	1970	4,634,994	395,954	232,896	163,058	19.9
	1971	4,629,489	251,914	257,419	-5,505	18.0
	1972	4,419,235	59,588	269,842	-210,254	16.4
	1973	4,111,514	-42,233	265,488	-307,721	15.5
	1974	4,255,010	388,385	244,889	143,496	17.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Wyoming						
	1975	4,483,502	460,356	231,864	228,492	19.3
	1976	4,393,582	138,626	228,546	-89,920	19.2
	1977	4,332,088	185,664	247,158	-61,494	17.5
	1978	4,311,824	224,757	245,021	-20,264	17.6
	1979	4,964,675	952,176	299,325	652,851	16.6
	1980	5,421,861	777,667	320,481	457,186	16.9
	1981	6,104,153	1,026,511	344,219	682,292	17.7
	1982	6,293,437	526,918	337,634	189,284	18.6
	1983	6,064,062	123,296	352,671	-229,375	17.2
	1984	5,725,977	34,981	373,066	-338,085	15.3
	1985	5,746,707	383,651	362,921	20,730	15.8
	1986	5,256,093	-188,526	302,088	-490,614	17.4
	1987	4,286,895	-719,447	249,751	-969,198	17.2
	1988	3,452,276	-625,319	209,300	-834,619	16.5
	1989	2,033,820	-1,233,879	184,577	-1,418,456	11.0
Total (1963-1989)		—	4,554,706	6,712,473	-2,157,767	—
Percent Change		-51.5	—	19.4	—	—
Undifferentiated[b]						
	1963	2,327,067	0	175,815	0	13.2
	1964	2,682,769	565,836	210,134	355,702	12.8
	1965	2,448,355	-31,324	203,090	-234,414	12.1
	1966	2,484,792	240,387	203,950	36,437	12.2
	1967	2,398,272	133,215	219,735	-86,520	10.9
	1968	2,594,910	429,336	232,698	196,638	11.2
	1969	2,563,191	203,250	234,969	-31,719	10.9
	1970	1,673,519	-780,356	109,316	-889,672	15.3
	1971	1,733,454	364,621	304,686	59,935	5.7
	1972	248,619	-1,418,034	66,801	-1,484,835	3.7
	1973	60,246	-94,033	94,340	-188,373	6
	1974	62,049	134,340	112,537	21,803	7
	1975	62,635	15,060	34,473	-19,413	1.8
	1976	68,387	32,214	26,463	5,751	2.6
	1977	29,897	7,886	46,376	-38,490	.6
	1978	27,123	17,094	19,868	-2,774	1.4
	1981	1,667,849	1,640,726	0	1,640,726	0
	1982	1,588,515	-79,334	0	-79,334	0
	1983	1,386,099	-202,416	0	-202,416	0
	1984	1,411,243	25,144	0	25,144	0
	1985	1,342,752	-68,491	0	-68,491	0
	1986	1,311,215	-31,537	0	-31,537	0
	1987	1,259,390	-51,825	0	-51,825	0
	1988	1,537,649	278,297	38	278,259	464.4
	1989	1,444,276	-93,289	84	-93,373	7,193.6
Total (1963-1989)		—	1,236,767	2,119,558	-882,791	—
Percent Change		-37.9	—	-100.0	—	—
Total All Companies						
	1963	188,540,057	0	9,350,625	0	20.2
	1964	189,165,424	10,639,942	10,014,575	625,367	18.9
	1965	191,899,705	13,105,056	10,370,775	2,734,281	18.5
	1966	195,130,322	14,367,183	11,136,566	3,230,617	17.5
	1967	194,391,527	10,858,254	11,597,049	-738,795	16.8
	1968	191,473,968	9,398,880	12,316,439	-2,917,559	15.5
	1969	184,165,368	5,882,915	13,191,515	-7,308,600	14.0
	1970	170,382,751	68,494	13,851,111	-13,782,617	12.3
	1971	158,681,804	2,284,002	13,984,949	-11,700,947	11.3
	1972	146,905,647	2,430,780	14,206,937	-11,776,157	10.3
	1973	132,374,965	-1,032,400	13,498,282	-14,530,682	9.8
	1974	120,542,602	1,132,687	12,965,050	-11,832,363	9.3
	1975	106,815,456	-1,734,398	11,991,748	-13,726,146	8.9
	1976	98,282,085	2,854,237	11,388,608	-8,534,371	8.6
	1977	92,888,736	5,527,300	10,920,649	-5,393,349	8.5
	1978	93,993,187	11,959,929	10,865,478	1,104,451	8.7
	1979	97,299,098	14,841,878	11,535,967	3,305,911	8.4
	1980	97,102,021	11,407,195	11,604,272	-197,077	8.4
	1981	98,339,488	13,196,777	11,959,310	1,237,467	8.2
	1982	98,710,561	11,304,485	10,933,412	371,073	9.0
	1983	94,497,523	5,283,864	9,496,902	-4,213,038	10.0
	1984	89,893,676	5,817,778	10,421,625	-4,603,847	8.6
	1985	85,101,967	4,126,042	8,917,751	-4,791,709	9.5
	1986	80,601,606	3,077,975	7,578,336	-4,500,361	10.6
	1987	65,135,136	-8,811,454	6,655,016	-15,466,470	9.8
	1988	48,791,559	-10,539,422	5,804,155	-16,343,577	8.4
	1989	37,670,092	-6,278,135	4,843,332	-11,121,467	7.8

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1989 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Total All Companies						
Total (1963-1989)		--	131,179,844	282,049,809	-150,869,965	--
Percent Change		-80.0	--	-48.2	--	--

[a] R/P = Reserves to Production.
[b] Reserves and Production which are not separable by FERC Production Areas or by States. Includes undesignated underground storage beginning in 1981.
[c] Warranty data prior to 1981 is not available.
-- = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Domestic Natural Gas Supplies of Major Jurisdictional Companies

Fifty-eight respondents, consisting of 24 major[2] and 34 minor companies from the universe of 74 respondents, reported owned or contracted domestic natural gas reserves and production for 1989. The remaining 16 respondents reporting on Form 15 purchased their entire gas supply from another respondent or foreign supplier or purchased supplemental supplies including coal gas, LNG, and SNG (Table 13). Such supplies are not included in the domestic natural gas total.

The 24 major companies collectively accounted for 91.8 percent (34.6 trillion cubic feet) of the domestic natural gas reserves and 89.3 percent (4.3 trillion cubic feet) of the production reported by interstate pipeline companies for 1989. The balance of domestic natural gas reserves and production, 3.1 and 0.5 trillion cubic feet respectively, was reported by the 34 minor companies (Table 9).

Annual production and purchases for the major companies indicate a decline from a high of 13.9 trillion cubic feet in 1971 and 1972 to 4.3 trillion cubic feet in 1989. Statistics also reveal a declining trend in reserves from 194.1 trillion cubic feet in 1967 to 34.6 trillion cubic feet in 1989 (Table 10).

The ratio of gross change in reserves to production for the 24 major companies in 1989 was -1.7 compared to -2.1 in 1988. A ratio less than 1 indicates a decrease in year-end reserves from the preceding year (Table 11).

[2]Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet, but are still classified as such to preserve continuity of data. West Texas Gathering Co. did not file for 1989, but is included in Table 11.

Table 9. Domestic Gas Reserves, Production, and Purchases, Year-End 1989

(Billion Cubic Feet)

Item	Major Companies[a]	Minor Companies	Total
Number of Companies	24	34	58
Reserves Dedicated as of December 31,1989			
Pipeline-owned Reserves	4,562	369	4,931
Reserves Dedicated Under Independent Producer Contracts	29,777	2,413	32,190
Other Supply Contracts[b]	239	323	562
Total	34,578	3,105	37,683
Percent of Total Dedicated Reserves	91.8	8.2	100.0
Production from Dedicated Reserves During 1989			
Pipeline-owned	134	19	153
Dedicated Under Independent Producer Contracts	3,958	402	4,360
Other Supply Contracts[b]	215	97	312
Total	4,307	518	4,825
Percent of Total Production	89.3	10.7	100.0

[a] Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet but are still classified as such to preserve continuity of data.

[b] Includes intrastate supplies pursuant to Section 311(b) and 312 of the NGPA of 1978.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 10. Domestic Reserves, Production, and Purchases of Major Gas Supply Companies,[a] 1963-1989

(Trillion Cubic Feet)

Year	Number of Companies	Annual Production and Purchases	Year-End Gas Reserves
1963	24	9.0	184.6
1964	24	9.7	185.0
1965	23	10.0	187.6
1966	24	10.8	190.0
1967	24	11.5	194.1
1968	24	12.2	191.3
1969	24	13.1	184.2
1970	25	13.8	170.1
1971	25	13.9	158.1
1972	25	13.9	144.2
1973	25	13.4	131.9
1974	26	12.7	118.3
1975	26	11.7	104.7
1976	26	11.1	96.4
1977	26	10.7	91.1
1978	26	10.7	92.2
1979	26	11.3	95.1
1980	26	11.4	95.2
1981	25	11.6	95.2
1982	25	10.6	95.5
1983	25	9.2	91.4
1984	25	10.1	87.0
1985	25	8.5	82.0
1986	25	7.1	77.6
1987	25	6.1	62.2
1988	25	5.3	46.0
1989	24	4.3	34.6

[a] Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet, but are still classified as such to preserve continuity of data.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 11. Gross Change in Reserves, Production, and Gross-Change Production (GC/P) Ratios of Major Companies

(Million Cubic Feet)

Major Gas Company	Year-End Reserves		Annual Gross Change in Reserves[a] Year-End Increase or Decrease					Total Change 12-31-84 to 12-31-89
	1984	1989	1985	1986	1987	1988	1989	
ANR Pipeline Co	2,474,452	1,387,299						
Gross Change in Reserves			843,030	223,709	-225,930	-424,134	-264,437	152,238
Annual Production			413,561	303,334	181,567	183,517	157,412	1,239,391
GC/P Ratio			2.04	.74	-1.24	-2.31	-1.68	.12
Arkla Inc	4,265,082	3,345,716						
Gross Change in Reserves			35,244	91,608	99,628	315,761	35,435	577,676
Annual Production			274,105	270,704	319,634	336,323	296,276	1,497,042
GC/P Ratio			.13	.34	.31	.94	.12	.39
CNG Transmission Corp	1,546,351	1,265,075						
Gross Change in Reserves			93,624	123,413	-1,861	74,291	12,180	301,647
Annual Production			170,340	119,078	105,453	94,776	93,276	582,923
GC/P Ratio			.55	1.04	-.02	.78	.13	.52
Colorado Interstate Gas Co	2,962,574	1,906,231						
Gross Change in Reserves			-26,613	153,505	11,189	-67,829	-375,389	-305,137
Annual Production			181,043	153,549	148,900	121,522	146,192	751,206
GC/P Ratio			-.15	1.00	.08	-.56	-2.57	-.41
Columbia Gas Transmission Corp	4,709,817	4,074,105						
Gross Change in Reserves			443,911	1,063,272	83,995	4,633	-92,874	1,502,937
Annual Production			556,990	530,928	399,779	393,210	257,742	2,138,649
GC/P Ratio			.80	2.00	.21	.01	-.36	.70
El Paso Natural Gas Co	15,329,214	2,766,095						
Gross Change in Reserves			977,785	350,179	-1,606,577	-5,520,878	-3,921,993	-9,721,484
Annual Production			1,007,396	686,372	686,867	286,963	174,037	2,841,635
GC/P Ratio			.97	.51	-2.34	-9.24	-2.54	-3.42
Florida Gas Transmission Co	933,566	649,298						
Gross Change in Reserves			199,866	292,491	151,424	15,120	236,920	895,821
Annual Production			206,019	207,219	250,220	249,737	266,894	1,180,089
GC/P Ratio			.97	1.41	.61	.06	.89	.76
K N Energy Inc	1,338,601	933,305						
Gross Change in Reserves			12,724	9,158	-32,571	49,686	-13,080	25,917
Annual Production			82,205	70,408	64,081	78,108	76,411	371,213
GC/P Ratio			.15	.13	-.51	.64	-.17	.07
Natural Gas Pipeline Co of America	5,132,067	1,162,315						
Gross Change in Reserves			664,471	87,692	-483,149	-2,242,616	-113,191	-2,086,793
Annual Production			824,313	551,939	171,265	177,858	157,584	1,882,959
GC/P Ratio			.81	.16	-2.82	-2.61	-.72	-1.11
Northern Natural Div InterNorth Inc	6,451,237	1,140,524						
Gross Change in Reserves			-379,422	89,667	-1,929,590	-1,112,417	-39,756	-3,371,518
Annual Production			507,392	434,303	364,218	306,970	326,312	1,939,195
GC/P Ratio			-.75	.21	-5.30	-3.62	-.12	-1.74
Northwest Pipeline Corp	4,905,504	653,822						
Gross Change in Reserves			87,019	-491,844	-878,892	-904,453	-1,569,092	-3,757,262
Annual Production			150,213	112,860	119,766	83,024	28,557	494,420
GC/P Ratio			.58	-4.36	-7.34	-.89	-4.95	-7.60
Panhandle Eastern Pipe Line Co	4,007,311	727,845						
Gross Change in Reserves			-171,925	321,482	-1,370,586	-673,313	-680,483	-2,574,825
Annual Production			259,041	225,585	122,664	57,258	40,093	704,641
GC/P Ratio			-.66	1.43	-1.17	-1.76	-6.97	-3.65
Sea Robin Pipeline Co	432,006	54,720						
Gross Change in Reserves			57,066	5,232	-176,903	-58,524	-11,041	-184,170
Annual Production			101,380	59,859	27,412	3,321	1,144	193,116
GC/P Ratio			.56	.09	-6.45	-7.62	-9.65	-.95
Southern Natural Gas Co	2,030,234	1,183,417						
Gross Change in Reserves			127,668	114,322	177,928	194,468	-16,301	598,085
Annual Production			321,110	306,144	301,515	278,806	237,327	1,444,902
GC/P Ratio			.40	.37	.59	.70	-.07	.41

Note: Footnotes appear at the end of the table.

Table 11. Gross Change in Reserves, Production, and Gross-Change Production (GC/P) Ratios of Major Companies (Continued)

(Million Cubic Feet)

Major Gas Company	Year-End Reserves		Annual Gross Change in Reserves[a] Year-End Increase or Decrease					Total Change 12-31-84 to 12-31-89
	1984	1989	1985	1986	1987	1988	1989	
Tennessee Gas Pipeline Div Tenneco	6,698,981	2,622,099						
Gross Change in Reserves			-299,054	546,277	-831,264	-257,558	-388,176	-1,229,775
Annual Production			570,785	593,312	685,345	556,492	441,173	2,847,107
GC/P Ratio			-.52	.92	-1.21	-.46	-.88	-.43
Texas Eastern Transmission Corp	3,757,447	3,194,840						
Gross Change in Reserves			259,134	400,337	159,495	495,575	1,074,955	2,389,496
Annual Production			634,920	607,576	598,497	608,828	502,282	2,952,103
GC/P Ratio			.41	.66	.27	.81	2.14	.81
Texas Gas Transmission Corp	2,306,440	1,087,371						
Gross Change in Reserves			44,816	29,968	-137,890	-361,572	28,297	-396,381
Annual Production			310,823	176,084	121,597	109,998	104,186	822,688
GC/P Ratio			.14	.17	-1.13	-3.29	.27	-.48
Transcontinental Gas Pipe Line Corp	5,537,290	2,050,256						
Gross Change in Reserves			61,854	180,424	271,369	168,876	-352,049	330,474
Annual Production			763,306	881,757	835,067	805,318	532,060	3,817,508
GC/P Ratio			.08	.20	.32	.21	-.66	.09
Transwestern Pipeline Co	1,571,225	752,818						
Gross Change in Reserves			372,303	-157,118	-85,998	-47,607	-70,649	10,931
Annual Production			218,220	172,742	175,543	124,745	138,088	829,338
GC/P Ratio			1.71	-.91	-.49	-.38	-.51	.01
Trunkline Gas Co	1,592,674	644,909						
Gross Change in Reserves			7,012	-9,113	-31,767	-62,535	61,623	-34,780
Annual Production			213,676	215,937	170,951	168,937	143,484	912,985
GC/P Ratio			.03	-.04	-.19	-.37	.43	-.04
United Gas Pipe Line Co	2,680,556	235,729						
Gross Change in Reserves			60,738	-777,953	-833,148	-29,037	-223,851	-1,803,251
Annual Production			407,067	132,744	48,659	32,320	20,786	641,576
GC/P Ratio			.15	-5.86	-7.12	-.90	-.77	-2.81
Valero Interstate Transmission Co	106,285	18,865						
Gross Change in Reserves			-33,446	35,577	17,356	-26,300	-10,845	-17,658
Annual Production			11,483	12,979	18,695	19,848	6,757	69,762
GC/P Ratio			-2.91	2.74	.93	-1.33	-1.61	-.25
West Texas Gathering Co	61,973	13,324						
Gross Change in Reserves			8,475	5,864	5,011	-52,568	0	-33,218
Annual Production			11,411	2,151	1,278	591	0	15,431
GC/P Ratio			.74	2.73	3.92	-8.95	.00	-2.15
Williams Natural Gas Co	5,214,675	2,267,363						
Gross Change in Reserves			31,170	30,995	-1,300,083	-297,971	-413,880	-1,949,769
Annual Production			259,024	261,543	191,093	153,892	131,991	997,543
GC/P Ratio			.12	.12	-6.80	-1.94	-3.14	-1.95
Williston Basin Interstate Pipeline	933,673	393,798						
Gross Change in Reserves			19,859	38,020	-310,835	-126,374	6,916	-372,414
Annual Production			40,795	40,324	28,945	30,333	27,064	167,461
GC/P Ratio			.49	.94	-.74	-4.17	.26	-2.22
Total	86,979,235	34,591,139						
Gross Change in Reserves			3,497,309	2,757,164	-9,259,649	-10,947,276	-7,100,761	-21,053,213
Annual Production			8,496,618	7,129,431	6,139,011	5,262,695	4,307,128	31,334,883
GC/P Ratio			.41	.39	-1.51	-2.08	-1.65	-.67

[a] Gross change in reserves is the net change in reserves plus annual production. Interstate pipeline purchases, pipeline imports, coal gasification, liquefied natural gas, and synthetic natural gas are excluded.

Note: GC/P = Ratio of Gross Change to Production.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Total Gas Supplies of the Jurisdictional Interstate Pipeline Companies

The total gas supplies of interstate pipeline companies consist of the dedicated, salable natural gas available from company-owned in-the-ground reserves, including gas in underground storage, reserves dedicated to or warranted under contracts with independent producers, gas purchased under contracts with other interstate pipeline companies, intrastate supplies contracted pursuant to Section 311(b) and 312 of the Natural Gas Policy Act of 1978, domestically produced coal gas, LNG, SNG, and imported natural gas and LNG.

The total gas supplies of each interstate pipeline company controlling a share of the dedicated domestic reserves are shown in detail in Table 12. Table 13 provides an account of the gas supplies of interstate pipeline companies that purchased their entire gas supply from another respondent, foreign supplier, or other source constituting supplies not considered to be domestic in-the-ground reserves. Presentation of the data in two tables clearly distinguishes those companies reporting gas supplies considered to be additive to domestic in-the-ground reserves from companies reporting gas that is not considered to be additive.

Natural gas pipeline being lowered into trench. Photo courtesy: Bob Thigpen, Texas Eastern Transmission Corp.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
ANR Pipeline Co.				
Gas Reserves				
Company Owned	0	0.00	114,063	6.12
Producer Contracts	157,412	92.06	1,273,236	68.31
Subtotal	157,412	92.06	1,387,299	74.43
Domestic Gas Supply				
Interstate Pipeline Purchases				
Great Lakes Gas Transmission Co.	0	.00	5,795	.31
Northern Natural Div InterNorth Inc.	0	.00	27,243	1.46
Coal Gasification Purchases				
Dakota Gasification Co.[a]	13,564	7.94	244,000	13.09
Subtotal	13,564	7.94	388,466	20.84
Import Gas Supply				
Pipeline Purchases				
Progas Ltd.[a]	0	.00	73,000	3.92
Trans Canada P L Ltd.[a]	0	.00	15,200	.82
Subtotal	0	.00	88,200	4.73
Company Total Gas Supply	170,976	100.00	1,863,965	100.00
Arkla Inc.				
Gas Reserves				
Company Owned	0	.00	31,088	.88
Producer Contracts	295,889	96.45	3,307,048	93.62
Subtotal	295,889	96.45	3,338,136	94.50
Domestic Gas Supply				
Interstate Pipeline Purchases				
Mississippi River Transmission Corp.	3,462	1.13	64,480	1.83
Natural Gas Pipeline Co of America	5	.00	80	.00
Tennessee Gas Pipeline Div Tenneco	60	.02	1,200	.03
Texas Eastern Transmission Corp.	483	.16	9,200	.26
Texas Gas Transmission Corp.	5,155	1.68	84,420	2.39
United Gas Pipe Line Co.	1,161	.38	23,920	.68
Williams Natural Gas Co.	182	.06	3,360	.10
Intrastate Pipeline Purchases				
Oneok Inc.[a]	387	.13	7,580	.21
Subtotal	10,895	3.55	194,240	5.50
Company Total Gas Supply	306,784	100.00	3,532,376	100.00
CNG Transmission Corp.				
Gas Reserves				
Company Owned	18,267	7.29	469,426	3.86
Producer Contracts	75,009	29.94	795,649	6.54
Subtotal	93,276	37.23	1,265,075	10.40
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	37,758	15.07	4,500,045	36.98
Texas Eastern Transmission Corp.	115,373	46.05	4,540,473	37.32
Texas Gas Transmission Corp.	4,124	1.65	1,861,960	15.30
Subtotal	157,255	62.77	10,902,478	89.60
Company Total Gas Supply	250,531	100.00	12,167,553	100.00
Colorado Interstate Gas Co.				
Gas Reserves				
Company Owned	39,746	27.19	568,812	29.84
Producer Contracts	106,446	72.81	1,337,419	70.16
Company Total Gas Supply	146,193	100.00	1,906,231	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Columbia Gas Transmission Corp				
Gas Reserves				
Company Owned	35,600	13.10	1,041,224	24.40
Producer Contracts	222,142	81.72	3,032,881	71.06
Subtotal	257,742	94.81	4,074,105	95.45
Domestic Gas Supply				
Interstate Pipeline Purchases				
Kentucky West Va Gas Co	0	.00	102,550	2.40
Tennessee Gas Pipeline Div Tenneco	1,136	.42	73,290	1.72
Texas Eastern Transmission Corp	10,756	3.96	18,192	.43
Transcontinental Gas Pipe Line Corp	2,210	.81	0	.00
Subtotal	14,102	5.19	194,032	4.55
Company Total Gas Supply	271,844	100.00	4,268,137	100.00
El Paso Natural Gas Co				
Gas Reserves				
Company Owned	12,898	7.41	247,713	8.96
Producer Contracts	161,139	92.59	2,518,382	91.04
Company Total Gas Supply	174,037	100.00	2,766,095	100.00
Florida Gas Transmission Co				
Gas Reserves				
Producer Contracts	124,399	46.56	465,278	69.70
Domestic Gas Supply				
Interstate Pipeline Purchases				
Southern Natural Gas Co	298	.11	18,263	2.74
Intrastate Pipeline Purchases				
Excel Gas Marketing Inc*	5,793	2.17	5,164	.77
Pan National Gas Sales INC*	2,435	.91	4,849	.73
Panhandle Gas Co*	134,267	50.25	174,007	26.07
Subtotal	142,793	53.44	202,283	30.30
Company Total Gas Supply	267,192	100.00	667,561	100.00
K N Energy Inc				
Gas Reserves				
Company Owned	0	.00	61,032	5.93
Producer Contracts	76,411	97.10	932,273	90.58
Subtotal	76,411	97.10	993,305	96.51
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	1,411	1.79	13,187	1.28
Northern Natural Div InterNorth Inc	303	.39	19,413	1.89
Panhandle Eastern Pipe Line Co	570	.72	3,279	.32
Subtotal	2,284	2.90	35,879	3.49
Company Total Gas Supply	78,695	100.00	1,029,184	100.00
Natural Gas Pipeline Co of America				
Gas Reserves				
Company Owned	14,781	4.12	398,362	25.36
Producer Contracts	142,159	39.61	756,113	48.13
Subtotal	156,940	43.73	1,154,475	73.49
Domestic Gas Supply				
Interstate Pipeline Purchases				
Cimarron Transmission Co	555	.15	0	.00
Great Lakes Gas Transmission Co	51,424	14.33	52,083	3.32
Valero Interstate Transmission Co	146	.04	0	.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Natural Gas Pipeline Co of America				
Domestic Gas Supply				
Intrastate Pipeline Purchases				
Acacia Pipeline Corp*	573	0.16	7,840	0.50
MV Pipeline Co*	71	.02	0	.00
Coal Gasification Purchases				
Great Plains Gasification*	10,876	3.03	207,260	13.19
Subtotal	63,645	17.73	267,183	17.01
Import Gas Supply				
Pipeline Purchases				
Progas Limited*	25,865	7.21	77,551	4.94
Other Gas Supply				
Amoco Production*	1,560	.43	0	.00
Arco Oil & Gas*	4,584	1.28	0	.00
Associated Intrastate Pl*	377	.11	0	.00
Associated Natural Gas Co*	559	.16	0	.00
Corpus Christi Oil & Gas*	541	.15	0	.00
GSF Energy Inc*	198	.06	0	.00
Gulf Energy Marketing*	2,253	.63	9,747	.62
Mobil Natural Gas Inc*	11,440	3.19	39,031	2.48
Natural Gas Clearinghouse*	4,933	1.37	0	.00
Odeco Oil & Gas*	465	.13	0	.00
Philips Petroleum*	1,635	.46	0	.00
PSI, Inc*	2,630	.73	1,760	.11
Sante Fe Energy*	636	.18	0	.00
Shell Gas Trading Company*	22,521	6.28	21,100	1.34
Sonat Exploration*	418	.12	0	.00
Tenngasco Corporation*	30	.01	104	.01
Various*	57,607	16.05	0	.00
Vengas Marketing Company*	38	.01	0	.00
Company Total Gas Supply	358,875	100.00	1,570,951	100.00
Northern Natural Div InterNorth Inc				
Gas Reserves				
Company Owned	0	.00	101,897	6.28
Producer Contracts	324,847	80.06	1,032,431	63.65
Subtotal	324,847	80.06	1,134,328	69.94
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northwest Alaskan Pipeline Co	61,667	15.20	326,939	20.16
Intrastate Pipeline Purchases				
Getty Oil Company*	1,465	.36	6,196	.38
Subtotal	63,128	15.56	333,135	20.54
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline*	17,803	4.39	154,487	9.52
Company Total Gas Supply	405,778	100.00	1,621,950	100.00
Northwest Pipeline Corp				
Gas Reserves				
Company Owned	9,979	22.42	405,801	31.59
Producer Contracts	18,578	41.74	248,021	19.31
Subtotal	28,557	64.16	653,822	50.89
Import Gas Supply				
Pipeline Purchases				
Westcoast Transmission*	15,953	35.84	630,859	49.11
Company Total Gas Supply	44,510	100.00	1,284,681	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Panhandle Eastern Pipe Line Co				
Gas Reserves				
Company Owned	0	0.00	113,023	9.25
Producer Contracts	34,674	50.02	584,651	47.84
Subtotal	34,674	50.02	697,674	57.08
Domestic Gas Supply				
Interstate Pipeline Purchases				
K N Energy Inc	1,349	1.95	0	.00
Northwest Alaskan Pipeline Co	26,515	38.25	319,350	26.13
Trunkline Gas Co	51	.07	171,191	14.01
Western Gas Interstate Co	0	.00	198	.02
Zenith Natural Gas Co	1,309	1.89	3,622	.30
Intrastate Pipeline Purchases				
Amoco Production*	5,245	7.57	30,171	2.47
Continental Natural Gas Inc*	174	.25	0	.00
Subtotal	34,643	49.98	524,532	42.92
Company Total Gas Supply	69,317	100.00	1,222,206	100.00
Sea Robin Pipeline Co				
Gas Reserves				
Producer Contracts	1,144	98.96	54,720	100.00
Other Gas Supply				
Unidentified*	12	1.04	0	.00
Company Total Gas Supply	1,156	100.00	54,720	100.00
Southern Natural Gas Co				
Gas Reserves				
Company Owned	0	.00	100,893	8.12
Producer Contracts	237,327	99.45	1,082,524	87.06
Subtotal	237,327	99.45	1,183,417	95.19
Domestic Gas Supply				
Interstate Pipeline Purchases				
Border Gas Inc	0	.00	29,220	2.35
Sea Robin Pipeline Co	0	.00	30,520	2.46
United Gas Pipe Line Co	1,310	.55	0	.00
Subtotal	1,310	.55	59,740	4.81
Company Total Gas Supply	238,637	100.00	1,243,157	100.00
Tennessee Gas Pipeline Div Tenneco				
Gas Reserves				
Company Owned	0	.00	116,104	3.04
Producer Contracts	441,173	91.83	2,505,995	65.66
Subtotal	441,173	91.83	2,622,099	68.70
Domestic Gas Supply				
Interstate Pipeline Purchases				
Border Gas Inc	0	.00	287,547	7.53
Gulf Energy Marketing*	6,958	1.45	14,953	.39
Coal Gasification Purchases				
Great Plains Gasification*	27,119	5.64	273,453	7.17
Subtotal	34,076	7.09	575,953	15.09
Import Gas Supply				
Pipeline Purchases				
Progas*	5,185	1.08	618,457	16.20
Company Total Gas Supply	480,436	100.00	3,816,509	100.00
Texas Eastern Transmission Corp				
Gas Reserves				
Company Owned	1,100	19	113,398	3.09

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Texas Eastern Transmission Corp				
Gas Reserves				
Producer Contracts	445,415	77.12	3,081,444	84.03
Subtotal	446,515	77.31	3,194,840	87.12
Domestic Gas Supply				
Interstate Pipeline Purchases				
Southern Natural Gas Co	536	.09	0	.00
Texas Gas Pipeline Corp	1,178	.20	2,000	.05
Texas Gas Transmission Corp	57,444	9.95	43,147	1.18
United Gas Pipe Line Co	1,644	.28	200,700	5.47
Intrastate Pipeline Purchases				
Anthem Energy Co[a]	124	.02	0	.00
Associated Natural Gas Co[a]	1,711	.30	0	.00
Bishop Pipeline Corp[a]	9	.00	0	.00
CNG Producing Co[a]	246	.04	0	.00
Concorde Gas Marketing Inc[a]	2,064	.36	0	.00
Diamond Pipeline Company[a]	2,318	.40	0	.00
Energy Marketing Exchg Inc[a]	28	.00	0	.00
Energy Production Corp (TX)[a]	3,644	.63	0	.00
Enermark Gas Gathering Cor[a]	202	.03	0	.00
Equitable Resources Marke[a]	781	.14	0	.00
Exxon Corp (tx)[a]	448	.08	0	.00
Four Point Energy Company[a]	1,219	.21	0	.00
Graham Energy Marketing Co[a]	378	.07	0	.00
Hunt Petroleum Co[a]	370	.06	0	.00
Jay-Cor 88 Joint Venture[a]	1,410	.24	0	.00
Jaywell Energy Corp[a]	679	.12	0	.00
Jernco Energy Inc (TX)[a]	134	.02	0	.00
Koch Hydrocarbon[a]	220	.04	0	.00
Loutex Energy Inc[a]	733	.13	0	.00
Marathon Oil Co[a]	123	.02	0	.00
Meridian[a]	26	.00	0	.00
Midcon Marketing Corp.[a]	18,133	3.14	0	.00
Mitchell Energy & Dl[a]	24	.00	0	.00
Mobil Natural Gas Inc[a]	29	.01	0	.00
Olympic Pipeline Company[a]	6	.00	0	.00
Oryx Energy Company[a]	587	.10	0	.00
Pan National Gas Sales INC[a]	439	.08	0	.00
Pennzoil Gas Marketing Co[a]	11,791	2.04	0	.00
PSI, Inc[a]	229	.04	0	.00
Sunbelt Oilfield Service [a]	292	.05	0	.00
Tejas Hydrocarbon[a]	1,127	.20	0	.00
Texaco Gas Marketing Inc[a]	1,005	.17	0	.00
Texcol Gas Services Inc[a]	600	.10	0	.00
Texas Eastern Gas Services[a]	3,829	.66	0	.00
Vesta Energy Co[a]	303	.05	0	.00
VHC Gas Systems LPD.[a]	476	.08	0	.00
Wilmar Pipelines Inc[a]	18	.00	0	.00
Woodward Marketing Inc[a]	12	.00	0	.00
Subtotal	116,569	20.18	245,847	6.70
Import Gas Supply				
Pipeline Purchases				
Progas Ltd[a]	14,476	2.51	226,499	6.18
Company Total Gas Supply	577,560	100.00	3,667,186	100.00
Texas Gas Transmission Corp				
Gas Reserves				
Company Owned	9	.01	106,258	5.42
Producer Contracts	98,678	63.06	981,113	50.05
Subtotal	98,687	63.07	1,087,371	55.47

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Texas Gas Transmission Corp				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	3,463	2.21	114,409	5.84
Texas Eastern Transmission Corp	48,833	31.21	758,345	38.69
Intrastate Pipeline Purchases				
Access Energy[a]	35	.02	0	.00
American Central Gas Mktg[a]	82	.05	0	.00
Amoco Production[a]	445	.28	0	.00
Arkla Gas Company[a]	242	.15	0	.00
Associated Natural Gas Co[a]	619	.40	0	.00
BP Operating Company[a]	363	.23	0	.00
Catamount Natural Gas Inc[a]	155	.10	0	.00
Citizens Gas Supply Corp[a]	77	.05	0	.00
CNG Producing Co[a]	348	.22	0	.00
Entrade Corp[a]	154	.10	0	.00
Four Point Energy Company[a]	111	.07	0	.00
Ladd Gas Marketing Inc[a]	34	.02	0	.00
Polaris Pipeline Co[a]	18	.01	0	.00
Reliance Gas Marketing[a]	14	.01	0	.00
Texaco Gas Marketing Inc[a]	2,801	1.79	0	.00
TXG Gas Marketing Company[a]	1	.00	0	.00
Subtotal	57,795	36.93	872,754	44.53
Company Total Gas Supply	156,482	100.00	1,960,125	100.00
Transcontinental Gas Pipe Line Corp				
Gas Reserves				
Company Owned	0	.00	76,562	3.61
Producer Contracts	532,060	97.19	1,973,694	93.13
Subtotal	532,060	97.19	2,050,256	96.75
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Pipeline Corp	1,774	.32	3,228	.15
Coal Gasification Purchases				
Great Plains Gasification[a]	13,583	2.48	65,736	3.10
Subtotal	15,357	2.81	68,964	3.25
Company Total Gas Supply	547,417	100.00	2,119,220	100.00
Transwestern Pipeline Co				
Gas Reserves				
Producer Contracts	138,088	100.00	752,818	100.00
Company Total Gas Supply	138,088	100.00	752,818	100.00
Trunkline Gas Co				
Gas Reserves				
Company Owned	0	.00	24,653	3.82
Producer Contracts	141,050	98.30	620,256	96.18
Subtotal	141,050	98.30	644,909	100.00
Domestic Gas Supply				
Intrastate Pipeline Purchases				
Access Energy Corporation[a]	13	.01	0	.00
Gulf Oil Corp[a]	8	.01	0	.00
Mobil Natural Gas Inc[a]	388	.27	0	.00
Pan National Gas Sales INC[a]	1,542	1.07	0	.00
Transamerican Natural Gas[a]	483	.34	0	.00
Subtotal	2,434	1.70	0	.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Major Gas Supply Companies				
Trunkline Gas Co				
Company Total Gas Supply	143,484	100.00	644,909	100.00
United Gas Pipe Line Co				
Gas Reserves				
Company Owned	0	.00	66,523	25.29
Producer Contracts	20,236	61.87	166,056	63.12
Subtotal	20,236	61.87	232,579	88.40
Domestic Gas Supply				
Interstate Pipeline Purchases				
Sea Robin Pipeline Co	297	.91	27,360	10.40
Unidentified[a]	9,029	27.61	0	.00
Intrastate Pipeline Purchases				
Despot Exploration[a]	0	.00	24	.01
G M Jordan[a]	0	.00	393	.15
J H Bond[a]	10	.03	84	.03
Koch Hydrocarbon[a]	151	.46	268	.10
LGS Exploration Production[a]	0	.00	98	.04
Majestic[a]	0	.00	607	.23
Rutherford Oil Corp[a]	0	.00	47	.02
Texas Crude Inc Enterprise[a]	0	.00	18	.01
Unidentified[a]	4	.01	0	.00
Union Oil Of California[a]	384	1.17	1,356	.52
Vernon Faulconer[a]	3	.00	165	.06
Wintershall[a]	1	.00	90	.03
Subtotal	9,876	30.20	30,510	11.60
Other Gas Supply				
Unidentified[a]	2,594	7.93	0	.00
Company Total Gas Supply	32,706	100.00	263,089	100.00
Valero Interstate Transmission Co				
Gas Reserves				
Producer Contracts	6,757	100.00	18,865	100.00
Company Total Gas Supply	6,757	100.00	18,865	100.00
Williams Natural Gas Co				
Gas Reserves				
Company Owned	0	.00	126,426	5.51
Producer Contracts	131,991	98.11	2,140,937	93.38
Subtotal	131,991	98.11	2,267,363	98.89
Domestic Gas Supply				
Interstate Pipeline Purchases				
Arkla Inc	288	.21	0	.00
Ringwood Gathering Co	2,170	1.61	25,466	1.11
Transwestern Pipeline Co	78	.06	0	.00
Subtotal	2,536	1.89	25,466	1.11
Company Total Gas Supply	134,527	100.00	2,292,829	100.00
Williston Basin Interstate Pipeline				
Gas Reserves				
Company Owned	1,960	7.24	278,675	70.77
Producer Contracts	25,104	92.76	115,123	29.23
Company Total Gas Supply	27,064	100.00	393,798	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Alabama-Tennessee Natural Gas Co				
Gas Reserves				
Producer Contracts	938	13.24	0	0.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	6,148	86.76	42,753	100.00
Company Total Gas Supply	7,086	100.00	42,753	100.00
Arkansas Oklahoma Gas Corp				
Gas Reserves				
Producer Contracts	2,289	100.00	33,616	100.00
Company Total Gas Supply	2,289	100.00	33,616	100.00
Bayou Interstate Pipeline System				
Gas Reserves				
Producer Contracts	435	100.00	217	100.00
Company Total Gas Supply	435	100.00	217	100.00
Caprock Pipeline Co				
Gas Reserves				
Producer Contracts	0	00	33,407	100.00
Company Total Gas Supply	0	100.00	33,407	100.00
Carnegie Natural Gas Co				
Gas Reserves				
Company Owned	1,631	8.43	26,840	5.34
Producer Contracts	2,748	14.20	36,218	7.21
Subtotal	4,379	22.63	63,058	12.55
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Eastern Transmission Corp	8,300	42.89	439,520	87.45
Intrastate Pipeline Purchases				
Apollo Petroleum Corporation*	568	2.93	0	00
Unidentified*	6,106	31.55	0	00
Subtotal	14,974	77.37	439,520	87.45
Company Total Gas Supply	19,353	100.00	502,578	100.00
East Tennessee Natural Gas Co				
Gas Reserves				
Producer Contracts	9,789	45.93	34,066	6.19
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	9,345	43.85	502,006	91.25
Intrastate Pipeline Purchases				
Intrastate Energy Co*	2,179	10.22	14,091	2.56
Subtotal	11,524	54.07	516,097	93.81
Company Total Gas Supply	21,313	100.00	550,163	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Eastern Shore Natural Gas Co				
Gas Reserves				
Producer Contracts	7,011	86.60	0	0.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	292	3.61	1,975	100.00
Transcontinental Gas Pipe Line Corp	793	9.79	0	.00
Subtotal	1,085	13.40	1,975	100.00
Company Total Gas Supply	8,096	100.00	1,975	100.00
Equitrans Inc[2]				
Gas Reserves				
Company Owned	2,806	5.45	83,243	9.57
Domestic Gas Supply				
Interstate Pipeline Purchases				
Kentucky West Va Gas Co	7,284	14.14	105,944	12.18
Tennessee Gas[a]	724	1.41	90,781	10.44
Texas Eastern Transmission Corp	15,243	29.60	340,576	39.17
Intrastate Pipeline Purchases				
J.H. Hager[a]	9,828	19.08	83,413	9.59
Natural Gas Clearinghouse[a]	13,893	26.98	150,865	17.35
Pemco Gas Company[a]	1,723	3.35	14,720	1.69
Subtotal	48,695	94.55	786,299	90.43
Company Total Gas Supply	51,501	100.00	869,542	100.00
Gas Transport Inc				
Gas Reserves				
Producer Contracts	1,018	56.84	10,178	41.92
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	773	43.16	14,099	58.08
Company Total Gas Supply	1,791	100.00	24,277	100.00
Inland Gas Co Inc				
Gas Reserves				
Company Owned	1,816	62.34	28,295	88.32
Producer Contracts	179	6.14	0	.00
Subtotal	1,995	68.49	28,295	88.32
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	918	31.51	3,743	11.68
Company Total Gas Supply	2,913	100.00	32,038	100.00
International Paper Co				
Gas Reserves				
Producer Contracts	2,287	96.05	14,647	100.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Louisiana-Nevada Transit Co	94	3.95	0	.00
Company Total Gas Supply	2,381	100.00	14,647	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Kentucky West Va Gas Co				
Gas Reserves				
Producer Contracts	21,813	100.00	325,542	100.00
Company Total Gas Supply	21,813	100.00	325,542	100.00
Lone Star Gas Co Div Enserch Corp				
Gas Reserves				
Company Owned	0	.00	6,277	6.55
Producer Contracts	14,228	100.00	89,586	93.45
Company Total Gas Supply	14,228	100.00	95,863	100.00
Louisiana-Nevada Transit Co				
Gas Reserves				
Producer Contracts	1,056	100.00	48,424	100.00
Company Total Gas Supply	1,056	100.00	48,424	100.00
Michigan Gas Storage Co				
Gas Reserves				
Company Owned	0	.00	48	.31
Domestic Gas Supply				
Interstate Pipeline Purchases				
Panhandle Eastern Pipe Line Co	400	2.44	15,200	99.69
Intrastate Pipeline Purchases				
CNG[a]	4,734	28.87	0	.00
PTC[a]	9,211	56.18	0	.00
Seagull Resources[a]	2,051	12.51	0	.00
Subtotal	16,396	100.00	15,200	99.69
Company Total Gas Supply	16,396	100.00	15,248	100.00
Mid Louisiana Gas Co				
Gas Reserves				
Company Owned	7,817	41.59	60,254	66.40
Producer Contracts	10,979	58.41	30,485	33.60
Company Total Gas Supply	18,796	100.00	90,739	100.00
Midwestern Gas Transmission Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	28,659	32.43	2,422,751	99.94
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[a]	7,115	8.05	0	.00
Other Gas Supply				
Earth Exploration Co[a]	24	.03	0	.00
Equitable Life Assur Soc[a]	265	.30	1,345	.06
Tenngasco Corporation[a]	52,297	59.19	0	.00
Company Total Gas Supply	88,360	100.00	2,424,096	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
MIGC Inc				
Gas Reserves				
Producer Contracts	3,012	100.00	29,033	100.00
Company Total Gas Supply	3,012	100.00	29,033	100.00
Mississippi River Transmission Corp				
Gas Reserves				
Company Owned	0	.00	53,336	5.89
Producer Contracts	143,120	97.09	817,769	90.27
Subtotal	143,120	97.09	871,105	96.15
Domestic Gas Supply				
Interstate Pipeline Purchases				
Natural Gas Pipeline Co of America	43	.03	1,342	.15
United Gas Pipe Line Co	1,481	1.00	33,500	3.70
Intrastate Pipeline Purchases				
East Texas Industrial[a]	551	.37	0	.00
Texas Power Co[a]	2,219	1.51	0	.00
Subtotal	4,294	2.91	34,842	3.85
Company Total Gas Supply	147,414	100.00	905,947	100.00
National Fuel Gas Supply Corp				
Gas Reserves				
Company Owned	4,543	10.14	70,374	3.77
Producer Contracts	11,292	25.20	204,394	10.95
Subtotal	15,835	35.34	274,768	14.73
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	2,698	6.02	39,580	2.12
Columbia Gas Transmission Corp	649	1.45	8,036	.43
Tennessee Firm Transport[a]	11,381	25.40	33,962	1.82
Tennessee Gas Pipeline Div Tenneco	5,639	12.59	1,265,592	67.83
Texas Eastern Transmission Corp	7,281	16.25	243,901	13.07
Transcontinental Gas Pipe Line Corp	1,319	2.94	0	.00
Subtotal	28,967	64.66	1,591,071	85.27
Company Total Gas Supply	44,802	100.00	1,865,839	100.00
North Penn Gas Co				
Gas Reserves				
Company Owned	0	.00	8,971	13.39
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	316	6.38	6,004	8.96
Tennessee Gas Pipeline Div Tenneco	3,046	61.46	51,073	76.21
Transcontinental Gas Pipe Line Corp	0	.00	971	1.45
Intrastate Pipeline Purchases				
Brooklyn Inter Nat Gas Co[a]	180	3.63	0	.00
Endevco Pipeline Co[a]	129	2.60	0	.00
Natural Gas Clearinghouse[a]	193	3.89	0	.00
Tenngasco[a]	1,040	20.98	0	.00
Transco Energy Marketing[a]	52	1.05	0	.00
Subtotal	4,956	100.00	58,048	86.61
Company Total Gas Supply	4,956	100.00	67,019	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Orange & Rockland Utilities Inc				
Gas Reserves				
Company Owned	0	0.00	7,870	1.75
Domestic Gas Supply				
Interstate Pipeline Purchases				
Algonquin Gas Transmission[a]	6,817	13.84	0	.00
Columbia Gas Development[a]	586	1.19	84,794	18.82
Columbia Gas Transmission Corp	1,948	3.96	141,143	31.33
Enron Corp[a]	730	1.48	54,269	12.05
Tennessee Gas Pipeline Div Tenneco	8,340	16.94	162,415	36.05
Texas Eastern Transmission Corp	1,488	3.02	0	.00
Intrastate Pipeline Purchases				
Brooklyn Inter Nat Gas Co[a]	321	65	0	.00
Catamount Natural Gas Inc[a]	62	13	0	.00
Citizens Energy Corp[a]	754	1.53	0	.00
Citizens Gas Supply Corp[a]	3,121	6.34	0	.00
Coastal Gas Marketing[a]	326	66	0	.00
Columbia Gas Development[a]	18	04	0	.00
Columbia Production[a]	268	54	0	.00
Equitable Resources Market[a]	311	63	0	.00
Jaywell Energy Corp[a]	78	16	0	.00
Natural Gas Clearinghouse[a]	8,369	17.00	0	.00
Peoples Service[a]	295	60	0	.00
Polaris Pipeline Co[a]	99	20	0	.00
Riley Natural Gas Company[a]	103	21	0	.00
Tenngasco[a]	7,637	15.51	0	.00
Texaco Gas Marketing Inc[a]	2,126	4.32	0	.00
Transco Energy Marketing[a]	4,119	8.37	0	.00
Unidentified[a]	866	1.76	0	.00
Union Pacific[a]	455	92	0	.00
Subtotal	49,239	100.00	442,621	98.25
Company Total Gas Supply	49,239	100.00	450,491	100.00
Pacific Gas Transmission Co				
Gas Reserves				
Producer Contracts	2,061	53	23,834	42
Import Gas Supply				
Pipeline Purchases				
Alberta & Southern Gas Co[a]	383,260	99.47	5,700,123	99.58
Company Total Gas Supply	385,321	100.00	5,723,957	100.00
Pacific Interstate Offshore Co				
Gas Reserves				
Producer Contracts	12,068	100.00	76,642	100.00
Company Total Gas Supply	12,068	100.00	76,642	100.00
Pacific Interstate Transmission Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northwest Alaskan Pipeline Co	89,721	100.00	1,138,800	100.00
Company Total Gas Supply	89,721	100.00	1,138,800	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Pacific Offshore Pipeline Co				
Gas Reserves				
Producer Contracts	12,441	100.00	153,300	100.00
Company Total Gas Supply	12,441	100.00	153,300	100.00
Pennsylvania & Southern Gas Co				
Gas Reserves				
Company Owned	0	00	330	90
Producer Contracts	0	00	247	68
Subtotal	0	00	577	1.58
Domestic Gas Supply				
Interstate Pipeline Purchases				
Eastern Shore Natural Gas Co	423	9.50	580	1.59
Tennessee Gas Pipeline Div Tenneco	1,720	38.63	31,537	86.43
Transcontinental Gas Pipe Line Corp	2,309	51.86	3,796	10.40
Subtotal	4,452	100.00	35,913	98.42
Company Total Gas Supply	4,452	100.00	36,490	100.00
Questar Pipeline Company[3]				
Gas Reserves				
Company Owned	0	00	19,624	4.36
Producer Contracts	44,471	80.12	378,374	84.03
Subtotal	44,471	80.12	397,998	88.39
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	8	01	1,498	33
Intrastate Pipeline Purchases				
Amoco Production[4]	0	00	11,390	2.53
Exxon Corp.[4]	1,860	3.35	14,888	3.31
Gary Energy Corporation[4]	2,012	3.62	5,506	1.22
Koch Hydrocarbon[4]	755	1.36	6,430	1.43
Mesa Pipeline Co[4]	2,680	4.83	0	00
Shell Oil[4]	3,699	6.66	11,659	2.59
Uinta Pipeline Co[4]	19	03	903	20
Subtotal	11,033	19.88	52,274	11.61
Company Total Gas Supply	55,504	100.00	450,272	100.00
Ringwood Gathering Co				
Gas Reserves				
Producer Contracts	8,332	100.00	40,361	100.00
Company Total Gas Supply	8,332	100.00	40,361	100.00
Texas Gas Pipeline Corp				
Gas Reserves				
Producer Contracts	3,739	100.00	17,588	100.00
Company Total Gas Supply	3,739	100.00	17,588	100.00
Washington Gas Light Co				
Gas Reserves				
Company Owned	0	00	3,080	12

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Minor Gas Supply Companies				
Washington Gas Light Co				
Gas Reserves				
Producer Contracts	83,732	59.70	0	0.00
Subtotal	83,732	59.70	3,080	12
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	4,786	3.41	684,375	26.46
Columbia Gas Transmission Corp	48,926	34.88	1,728,498	66.83
Transcontinental Gas Pipe Line Corp	2,812	2.00	170,455	6.59
Subtotal	56,524	40.30	2,583,328	99.88
Company Total Gas Supply	140,256	100.00	2,586,408	100.00
Western Gas Interstate Co				
Gas Reserves				
Company Owned	187	5.34	891	4.18
Producer Contracts	1,277	36.44	8,211	38.50
Subtotal	1,464	41.78	9,102	42.68
Domestic Gas Supply				
Interstate Pipeline Purchases				
El Paso Natural Gas Co	138	3.94	3,100	14.54
Intrastate Pipeline Purchases				
Coastal Gas Marketing[a]	262	7.48	0	00
Crouch Petroleum[a]	147	4.20	9,125	42.79
Enron Gas Marketing[a]	652	18.61	0	00
Maxus Energy[a]	52	1.48	0	00
Meridian[a]	219	6.25	0	00
Phillips 66 Natural Gas[a]	193	5.51	0	00
PSI, Inc[a]	377	10.76	0	00
Subtotal	2,040	58.22	12,225	57.32
Company Total Gas Supply	3,504	100.00	21,327	100.00
Zenith Natural Gas Co				
Gas Reserves				
Producer Contracts	1,495	100.00	6,475	100.00
Company Total Gas Supply	1,495	100.00	6,475	100.00

[1] Formerly Consolidated Gas Transmission Co.
[2] Formerly Equitable Gas Company
[3] Formerly Mountain Fuel Resources Inc.
[a] Nonjurisdictional companies not required to file Form 15 reports.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Algonquin Gas Transmission Co				
Gas Reserves				
Producer Contracts	72	0.05	0	0.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	5,905	4.29	65,513	3.87
National Fuel Gas Supply Corp	4,690	3.41	19,397	1.15
Texas Eastern Transmission Corp	127,015	92.25	1,608,427	94.99
Subtotal	137,610	99.95	1,693,337	100.00
Company Total Gas Supply	137,682	100.00	1,693,337	100.00
Associated Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Eastern Transmission Corp	566	11.57	16,480	92.43
Texas Gas Transmission Corp	484	9.89	1,350	7.57
Subtotal	1,050	21.46	17,830	100.00
Other Gas Supply				
Seeco Inc[a]	3,836	78.40	0	.00
Texas Eastern Gas Services[a]	7	.14	0	.00
Company Total Gas Supply	4,893	100.00	17,830	100.00
Bluefield Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	364	100.00	5,280	100.00
Company Total Gas Supply	364	100.00	5,280	100.00
Border Gas Inc				
Import Gas Supply				
Pipeline Purchases				
Petroleos Mexicanos[a]	0	.00	287,547	100.00
Company Total Gas Supply	0	100.00	287,547	100.00
Boundary Gas Inc				
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[a]	33,287	100.00	217,840	100.00
Company Total Gas Supply	33,287	100.00	217,840	100.00
Glacier Gas Company				
Gas Reserves				
Company Owned	355	100.00	2,529	100.00
Company Total Gas Supply	355	100.00	2,529	100.00
Granite State Gas Transmission Inc				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Algonquin Gas Transmission Co	1,065	2.66	47,508	10.94
Boundary Gas Inc	4,381	10.93	31,175	7.18
Tennessee Gas Pipeline Div Tenneco	9,519	23.74	272,746	62.80
Intrastate Pipeline Purchases				
Tenngasco[a]	18,255	45.53	0	.00

Note: Footnote appears at the end of the table.

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Granite State Gas Transmission Inc				
Domestic Gas Supply				
Subtotal	33,220	82.86	351,429	80.92
Import Gas Supply				
Pipeline Purchases				
Shell Canada Limited[P]	6,872	17.14	82,875	19.08
Company Total Gas Supply	40,092	100.00	434,304	100.00
Great Lakes Gas Transmission Co				
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[P]	76,116	100.00	118,014	100.00
Company Total Gas Supply	76,116	100.00	118,014	100.00
Great Plains Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northern Natural Div InterNorth Inc	0	.00	6,593	43.84
Company Total Gas Supply	0	100.00	15,040	100.00
Indiana Utilities Corp				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Transmission Corp	393	100.00	2,232	100.00
Company Total Gas Supply	393	100.00	2,232	100.00
Inter-City Minnesota Pipelines Ltd				
Import Gas Supply				
Pipeline Purchases				
ICG Transmission Ltd[P]	4,307	100.00	48,399	100.00
Company Total Gas Supply	4,307	100.00	48,399	100.00
Iowa-Illinois Gas & Electric Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Natural Gas Pipeline Co of America	44,454	93.69	11,110	100.00
Northern Natural Div InterNorth Inc	2,995	6.31	0	.00
Company Total Gas Supply	47,449	100.00	11,110	100.00
Northwest Alaskan Pipeline Co				
Import Gas Supply				
Pipeline Purchases				
Pan-Alberta Gas Ltd[P]	188,665	100.00	5,459,200	100.00
Company Total Gas Supply	188,665	100.00	5,459,200	100.00
Ohio River Pipeline Corp				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Transmission Corp	4,716	100.00	15,376	100.00
Company Total Gas Supply	4,716	100.00	15,376	100.00

Note: Footnote appears at the end of the table.

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1989	Percent Company Total	Volume 1989	Percent Company Total
Raton Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	1,100	100.00	6,300	100.00
Company Total Gas Supply	1,100	100.00	6,300	100.00
South Georgia Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Southern Natural Gas Co	4,050	100.00	31,462	100.00
Company Total Gas Supply	4,050	100.00	31,462	100.00

* Nonjurisdictional companies not required to file Form 15 reports.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Deliverability

All interstate pipeline companies reporting on Form 15 project the annual volumes of natural gas expected to be deliverable from each domestic certificated source for each of the 5 years following the report year. These data are filed in Schedule II. Additionally, 34 companies are required by FERC to report in Schedule I a 20-year projection of the total annual volumes of gas, including pipeline purchases and imports, deliverable from total year-end gas supplies. These deliverability forecasts are the reporting company's best year-by-year estimates of its capability to deliver gas from present gas supplies (Table 16). Future load variations and future changes in gas supply are not considered. The market requirements are only those that have been authorized at the end of the report year. Both firm and interruptible authorized gas requirements, however, are included.

A comparison of the projected volumes deliverable over the past 5 years (Table 14) shows an aggregate projection of 39.3 trillion cubic feet in 1985, decreasing by 51.7 percent to 19.0 trillion cubic feet in 1989. Annual deliveries for the 5-year period, 1990-1994, are projected to decline from 5.5 trillion cubic feet in 1990 to 2.4 trillion cubic feet in 1994. Aggregate deliveries projected for the 5-year period are shown by State in Figure 4.

Table 15 shows 1990-1994 deliveries projected from base year 1989 year-end reserves and the percent depletion in reserves by State and substate area. The depletion of total year-end 1989 reserves projected by year-end 1994 is 50.4 percent.

Twenty-year deliverability summaries for the 32 companies that filed Schedule I are shown in Table 16. A progressive decline in total projected deliveries is clear in the composite of these data (Table 17). Figure 5 shows reported production and a comparison of projected deliveries from year-end 1963 and 1989.

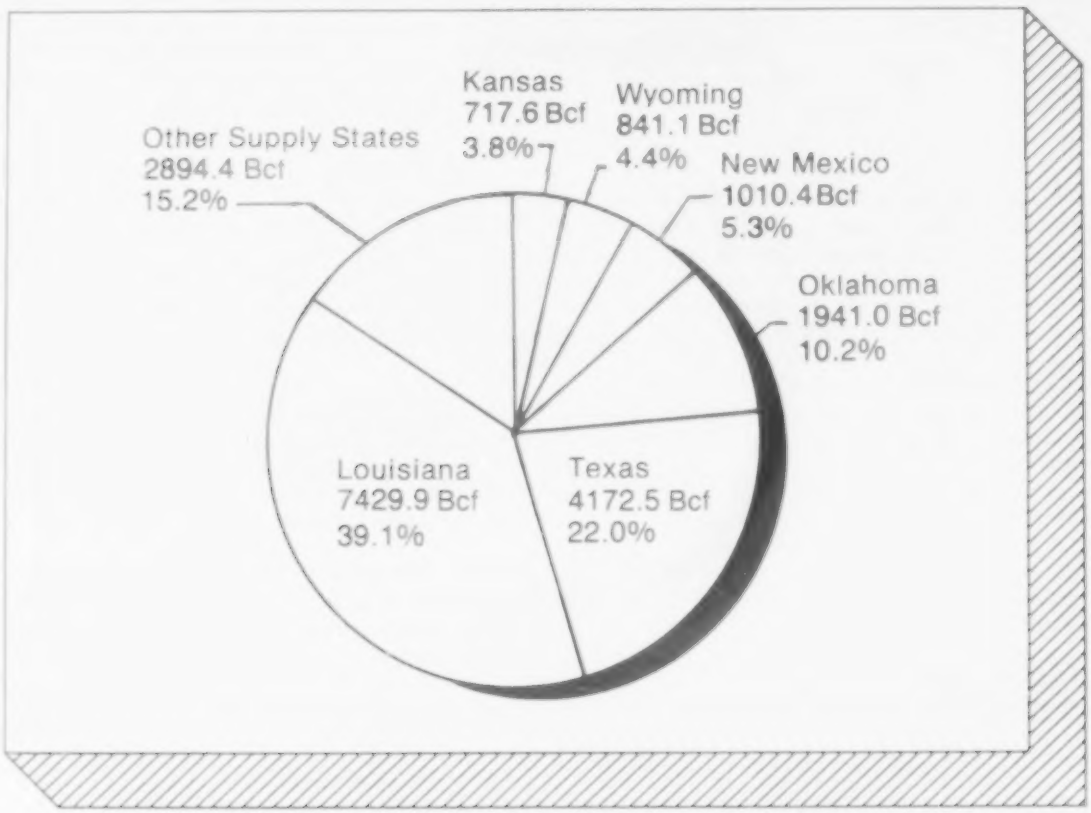
Table 14. Comparisons of Composite Five-Year Deliverability Projections from Year-End Dedicated Domestic Gas Reserves

(Billion Cubic Feet)

Year	Annual Volumes Scheduled vs. Actual Volumes Purchased or Produced				
	1985	1986	1987	1988	1989
1985	* 8,918	—	—	—	—
1986	10,795	* 7,578	—	—	—
1987	9,076	9,193	* 6,655	—	—
1988	7,721	7,751	7,634	* 5,804	—
1989	6,455	6,492	6,671	6,719	* 4,843
1990	5,268	5,456	5,557	5,457	5,544
1991	—	4,724	4,587	4,400	4,373
1992	—	—	3,929	3,653	3,644
1993	—	—	—	2,990	3,000
1994	—	—	—	—	2,446
Five-Year Deliverability Projections[b]	39,315	33,616	28,478	23,219	19,007
Year-End Reserves	85,102	80,602	65,135	48,792	37,685
Five-Year Deliverability Projections as a Percent of Year-End Reserves	46.2	41.7	43.7	47.6	50.4

* Actual volume purchased and/or produced for the year indicated.
[b] Sum of annual volumes scheduled.
— = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 4. Five-Year Projected Deliverability by State
(Billion Cubic Feet)



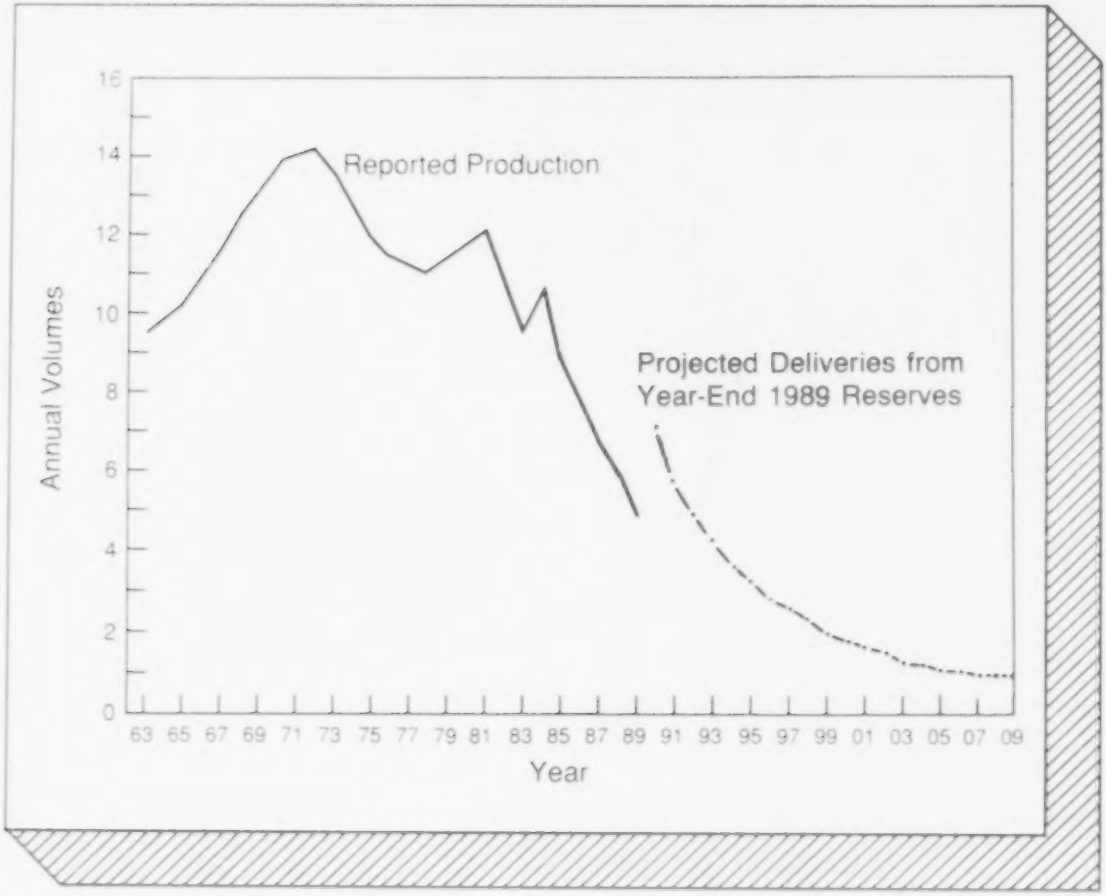
Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 15. Five-Year (1990-1994) Composite Deliverability Projections
(Billion Cubic Feet)

State	Gas Reserves 12-31-89	Production 1989	Annual Deliverability Projections						Remaining Reserves 12-31-94	Percent Depletion 12-31-94
			1990	1991	1992	1993	1994	Total		
Alabama	217.4	34.4	34.8	27.9	27.7	25.1	21.6	137.2	80.2	63.1
Arizona	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0
Arkansas	1,856.3	166.8	220.0	206.4	178.6	167.3	162.2	934.3	922.0	50.3
California	229.9	24.5	25.5	23.0	21.2	19.8	18.6	108.0	121.9	47.0
Colorado	488.6	42.7	49.3	42.9	37.0	33.4	25.6	188.3	300.3	38.5
Florida	9.3	1.5	1.3	1.1	.9	.7	.6	4.6	4.7	49.5
Illinois	2.9	1.1	.3	.3	.2	.2	.2	1.2	1.7	41.4
Kansas	3,090.4	187.8	190.9	141.0	130.9	127.3	127.4	717.6	2,372.8	23.2
Kentucky	597.4	40.7	45.3	42.6	40.8	39.3	38.0	206.1	391.3	34.5
Louisiana										
Northern Louisiana	1,099.6	124.5	167.7	152.9	126.7	105.2	88.9	641.4	458.2	58.3
Southern Louisiana	9,185.8	1,573.1	2,073.9	1,704.8	1,344.5	978.4	687.0	6,788.5	2,397.3	73.9
Onshore	1,831.3	242.2	381.9	293.3	228.4	174.8	140.8	1,219.2	612.1	66.6
Warranty[a]	.0	128.9	.0	.0	.0	.0	.0	.0	.0	.0
Onshore Total	1,831.3	371.1	381.9	293.3	228.4	174.8	140.8	1,219.2	612.1	66.6
Offshore State	183.6	52.9	49.0	43.9	36.8	19.0	12.2	160.9	22.7	87.6
Offshore Federal	7,170.9	1,149.1	1,643.0	1,367.6	1,079.3	784.6	534.0	5,408.4	1,762.5	75.4
Offshore Total	7,354.5	1,202.0	1,692.0	1,411.5	1,116.1	803.6	546.2	5,569.3	1,785.2	75.7
State Total	10,285.3	1,697.6	2,241.5	1,857.7	1,471.2	1,083.7	775.8	7,429.9	2,855.4	72.2
Maryland	41.8	83.8	1	0	0	0	0	2	41.6	5
Massachusetts	0	18.3	0	0	0	0	0	0	0	0
Michigan	114.1	16.0	0	0	0	0	0	0	114.1	0
Mississippi	320.1	110.7	65.7	44.6	32.9	24.5	17.7	185.4	134.7	57.9
Missouri	13.3	9.6	13.3	0	0	0	0	13.3	0	100.0
Montana	439.5	22.1	24.2	8.6	7.5	7.3	6.7	54.3	385.2	12.4
Nebraska	87.6	.3	1.5	1	1	0	0	1.7	85.9	1.9
New Mexico										
San Juan Basin	2,086.6	95.2	142.3	137.8	129.9	123.5	118.1	651.5	1,435.1	31.2
Permian Basin	811.9	126.7	102.1	76.9	70.6	58.6	50.7	358.8	453.1	44.2
State Total	2,898.5	221.9	244.4	214.7	200.4	182.0	168.9	1,010.4	1,888.1	34.9
New York	143.1	34.7	10.8	9.6	8.8	8.1	7.5	44.7	98.4	31.2
North Dakota	35.2	12.5	9.9	5.9	5.6	3.1	1.1	25.7	9.5	73.0
Ohio	235.7	11.9	22.6	19.8	17.7	16.0	14.6	90.7	145.0	38.5
Oklahoma	3,950.4	460.6	504.3	415.4	386.1	341.3	293.9	1,941.0	2,009.4	49.1
Pennsylvania	778.8	42.6	47.6	43.1	39.4	36.6	34.2	200.9	577.9	25.8
South Dakota	2.3	.5	.3	.3	.3	.3	.2	1.2	1.1	52.2
Tennessee	14.1	2.2	2.2	1.9	1.6	1.4	1.2	8.3	5.8	58.9
Texas										
RR District No. 1 (North)	1.5	.2	.3	.1	.1	.1	.1	.7	.8	46.7
RR District No. 1 (South)	228.9	33.8	55.0	42.7	35.6	26.7	20.6	180.5	48.4	78.9
RR District No. 2	394.6	191.5	220.0	38.7	32.9	27.8	22.8	342.2	52.4	86.7
RR District No. 3	127.4	24.5	32.4	25.6	19.0	12.8	9.0	98.8	28.6	77.6
RR District No. 4	653.6	137.8	173.1	124.8	85.4	56.0	41.8	481.1	172.5	73.6
RR District No. 5	1.4	.5	.3	.2	.2	.1	.1	1.0	.4	71.4
RR District No. 6	760.0	95.8	120.7	103.2	89.5	80.6	69.8	463.8	296.2	61.0
RR District No. 7B	.7	.1	.1	.1	.1	.0	.0	.3	.4	42.9
RR District No. 7C	176.8	36.1	30.2	13.4	12.0	10.8	11.6	78.1	98.7	44.2
RR District No. 8	425.1	70.9	60.7	42.9	40.0	37.5	30.0	211.1	214.0	49.7
RR District No. 8A	3.6	1.3	.9	.5	.4	.4	.3	2.4	1.2	66.7
RR District No. 9	146.2	38.4	34.7	26.2	20.9	16.5	12.9	111.2	35.0	76.1
RR District No. 10	1,384.2	176.7	153.1	105.3	100.4	93.5	88.6	541.0	843.2	39.1
Offshore State	53.2	5.4	23.1	11.8	7.1	4.2	3.0	49.1	4.1	92.3
Offshore Federal	1,968.2	444.1	528.6	421.2	298.9	217.2	145.3	1,611.1	357.1	81.9
Offshore General	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
Offshore Total	2,021.4	449.8	551.7	433.0	306.0	221.4	148.3	1,660.2	361.2	82.1
State Total	6,325.4	1,257.5	1,433.3	956.7	742.5	584.1	455.9	4,172.5	2,152.9	66.0
Utah	270.8	21.7	22.3	20.0	20.7	21.2	21.2	105.4	165.4	38.9
Virginia	128.1	16.2	16.7	13.7	11.3	9.5	8.1	59.4	68.7	46.4
Washington	6.6	.0	.0	.0	.0	.0	.0	.0	6.6	.0
West Virginia	1,609.0	118.6	121.5	110.5	103.2	95.2	88.8	519.0	1,090.0	32.3
Wyoming	2,033.8	184.6	194.4	165.7	155.5	171.2	154.3	841.1	1,192.7	41.4
Undesignated[b]	1,459.6	1	.0	.0	1.7	1.5	1.4	4.7	1,454.9	.3
Total All States	37,685.4	4,843.3	5,543.9	4,373.2	3,643.8	3,000.2	2,445.8	19,006.9	18,678.5	50.4

[a] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[b] Includes reserves in underground storage which were reported without a State designation.
Note: Totals may not equal sum of components due to independent rounding.

Figure 5. Production and Composite Forecast of Annual Deliveries 1963 through 2008
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 16. Deliverability Summaries: Estimated Annual Volumes
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
ANR Pipeline Co						
1990	161,258	0	21,775	183,033	--	--
1991	161,258	0	21,775	183,033	--	--
1992	161,258	0	21,775	183,033	--	--
1993	161,258	0	21,775	183,033	--	--
1994	125,242	0	21,775	147,017	--	--
1995	96,320	0	12,775	109,095	--	--
1996	81,405	0	12,775	94,180	--	--
1997	71,703	0	12,775	84,478	--	--
1998	61,018	0	12,775	73,793	--	--
1999	50,660	0	12,775	63,435	--	--
2000	43,913	0	12,775	56,688	--	--
2001	34,751	0	12,775	47,526	--	--
2002	26,311	0	12,775	39,086	--	--
2003	24,589	0	12,775	37,364	--	--
2004	9,566	0	12,775	22,341	--	--
2005	2,625	0	12,775	15,400	--	--
2006	101	0	12,775	12,876	--	--
2007	0	0	12,775	12,775	--	--
2008	0	0	12,775	12,775	--	--
2009	0	0	1,939	1,939	--	--
Projected Total	1,273,236	0	289,664	1,562,900	183,033	837,382
Arkla Inc						
1990	416,203	379	9,333	425,915	--	--
1991	385,587	379	9,333	395,299	--	--
1992	353,762	379	9,333	363,474	--	--
1993	321,318	379	9,333	331,030	--	--
1994	289,209	379	9,333	298,921	--	--
1995	249,264	379	9,333	258,976	--	--
1996	221,145	379	9,333	230,857	--	--
1997	191,511	379	9,333	201,223	--	--
1998	170,430	379	9,333	180,142	--	--
1999	131,555	379	9,333	141,267	--	--
2000	109,910	379	9,333	119,622	--	--
2001	100,089	379	9,333	109,801	--	--
2002	89,022	379	9,333	98,734	--	--
2003	76,614	379	9,333	86,326	--	--
2004	58,694	379	9,333	68,406	--	--
2005	49,721	379	9,333	59,433	--	--
2006	39,020	379	9,333	48,732	--	--
2007	25,577	379	9,333	35,289	--	--
2008	19,833	379	9,333	29,545	--	--
2009	8,584	379	9,333	18,296	--	--
Projected Total	3,307,048	7,580	186,660	3,501,288	644,604	0
Carnegie Natural Gas Co						
1990	4,400	0	21,976	26,376	--	--
1991	4,400	0	21,976	26,376	--	--
1992	4,150	0	21,976	26,126	--	--
1993	4,050	0	21,976	26,026	--	--
1994	4,000	0	21,976	25,976	--	--
1995	3,950	0	21,976	25,926	--	--
1996	3,900	0	21,976	25,876	--	--
1997	3,850	0	21,976	25,826	--	--
1998	3,800	0	21,976	25,776	--	--
1999	2,908	0	21,976	24,884	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Carnegie Natural Gas Co						
2000	2,850	0	21,976	24,826	--	--
2001	2,800	0	21,976	24,776	--	--
2002	2,650	0	21,976	24,626	--	--
2003	2,450	0	21,976	24,426	--	--
2004	2,250	0	21,976	24,226	--	--
2005	2,250	0	21,976	24,226	--	--
2006	2,150	0	21,976	24,126	--	--
2007	2,150	0	21,976	24,126	--	--
2008	2,050	0	21,976	24,026	--	--
2009	2,050	0	21,976	24,026	--	--
Projected Total	63,058	0	439,520	502,578	15,193	0
CNG Transmission Corp						
1990	96,283	0	565,905	662,188	--	--
1991	92,627	0	543,727	636,354	--	--
1992	87,437	0	544,879	632,316	--	--
1993	83,606	0	543,727	627,333	--	--
1994	79,528	0	543,727	623,255	--	--
1995	71,813	0	543,727	615,540	--	--
1996	63,837	0	544,879	608,716	--	--
1997	57,073	0	543,727	600,800	--	--
1998	52,119	0	543,727	595,846	--	--
1999	47,526	0	543,727	591,253	--	--
2000	43,022	0	544,879	587,901	--	--
2001	30,928	0	543,727	574,655	--	--
2002	28,995	0	543,727	572,722	--	--
2003	27,162	0	543,727	570,889	--	--
2004	24,375	0	544,879	569,254	--	--
2005	22,869	0	543,727	566,596	--	--
2006	21,665	0	543,727	565,392	--	--
2007	19,617	0	543,727	563,344	--	--
2008	18,246	0	544,879	563,125	--	--
2009	16,524	0	543,727	560,251	--	--
Projected Total	985,252	0	10,902,478	11,887,730	296,646	0
Colorado Interstate Gas Co						
1990	143,126	0	0	143,126	--	--
1991	138,603	0	0	138,603	--	--
1992	138,614	0	0	138,614	--	--
1993	132,162	0	0	132,162	--	--
1994	125,110	0	0	125,110	--	--
1995	120,284	0	0	120,284	--	--
1996	103,141	0	0	103,141	--	--
1997	88,870	0	0	88,870	--	--
1998	76,973	0	0	76,973	--	--
1999	66,525	0	0	66,525	--	--
2000	57,660	0	0	57,660	--	--
2001	50,170	0	0	50,170	--	--
2002	43,720	0	0	43,720	--	--
2003	38,303	0	0	38,303	--	--
2004	33,676	0	0	33,676	--	--
2005	29,614	0	0	29,614	--	--
2006	26,286	0	0	26,286	--	--
2007	23,376	0	0	23,376	--	--
2008	20,847	0	0	20,847	--	--
2009	18,619	0	0	18,619	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Colorado Interstate Gas Co						
Projected Total	1,475,679	0	0	1,475,679	113,260	93,505
Columbia Gas Transmission Corp						
1990	533,516	0	13,887	547,403	—	—
1991	474,239	0	9,475	483,714	—	—
1992	396,571	0	9,499	406,070	—	—
1993	339,620	0	9,475	349,095	—	—
1994	277,319	0	9,475	286,794	—	—
1995	231,444	0	9,475	240,919	—	—
1996	189,733	0	9,499	199,232	—	—
1997	152,208	0	9,475	161,683	—	—
1998	119,347	0	9,475	128,822	—	—
1999	99,541	0	9,475	109,016	—	—
2000	83,720	0	9,499	93,219	—	—
2001	70,222	0	9,475	79,697	—	—
2002	57,602	0	9,475	67,077	—	—
2003	44,828	0	9,475	54,303	—	—
2004	37,469	0	9,499	46,968	—	—
2005	32,473	0	9,475	41,948	—	—
2006	26,613	0	9,475	36,088	—	—
2007	23,993	0	9,475	33,468	—	—
2008	21,683	0	9,499	31,182	—	—
2009	19,365	0	9,475	28,860	—	—
Projected Total	3,231,526	0	194,032	3,425,558	271,839	366,978
El Paso Natural Gas Co						
1990	238,692	0	0	238,692	—	—
1991	220,169	0	0	220,169	—	—
1992	199,846	0	0	199,846	—	—
1993	184,631	0	0	184,631	—	—
1994	162,663	0	0	162,663	—	—
1995	150,739	0	0	150,739	—	—
1996	142,634	0	0	142,634	—	—
1997	135,720	0	0	135,720	—	—
1998	129,551	0	0	129,551	—	—
1999	124,349	0	0	124,349	—	—
2000	54,106	0	0	54,106	—	—
2001	49,932	0	0	49,932	—	—
2002	46,054	0	0	46,054	—	—
2003	43,032	0	0	43,032	—	—
2004	40,138	0	0	40,138	—	—
2005	37,554	0	0	37,554	—	—
2006	35,343	0	0	35,343	—	—
2007	33,371	0	0	33,371	—	—
2008	30,222	0	0	30,222	—	—
2009	30,222	0	0	30,222	—	—
Projected Total	2,088,968	0	0	2,088,968	147,450	1,428,358

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Equitrans Gas Co						
1990	14,001	7,732	23,002	44,735	—	—
1991	13,252	7,023	26,005	46,280	—	—
1992	12,556	8,052	23,726	44,334	—	—
1993	11,908	6,910	25,065	43,883	—	—
1994	11,305	7,049	25,441	43,795	—	—
1995	10,742	7,143	25,823	43,708	—	—
1996	10,217	7,193	26,210	43,620	—	—
1997	9,725	7,336	26,472	43,533	—	—
1998	9,265	7,444	26,737	43,446	—	—
1999	8,834	7,521	27,004	43,359	—	—
2000	8,429	7,569	27,274	43,272	—	—
2001	8,049	7,618	27,519	43,186	—	—
2002	7,691	7,669	27,739	43,099	—	—
2003	7,355	7,697	27,961	43,013	—	—
2004	7,037	7,733	28,157	42,927	—	—
2005	6,738	7,777	28,326	42,841	—	—
2006	6,455	7,805	28,496	42,756	—	—
2007	6,188	7,844	28,638	42,670	—	—
2008	5,934	7,870	28,781	42,585	—	—
2009	5,695	7,880	28,925	42,500	—	—
Projected Total	181,376	150,865	537,301	869,542	44,735	224,673
Florida Gas Transmission Co						
1990	101,356	189,498	18,262	309,116	—	—
1991	86,399	0	0	86,399	—	—
1992	64,201	0	0	64,201	—	—
1993	43,583	0	0	43,583	—	—
1994	29,094	0	0	29,094	—	—
1995	26,334	0	0	26,334	—	—
1996	20,414	0	0	20,414	—	—
1997	16,910	0	0	16,910	—	—
1998	13,102	0	0	13,102	—	—
1999	9,698	0	0	9,698	—	—
2000	8,635	0	0	8,635	—	—
2001	6,688	0	0	6,688	—	—
2002	4,864	0	0	4,864	—	—
2003	4,226	0	0	4,226	—	—
2004	3,372	0	0	3,372	—	—
2005	2,772	0	0	2,772	—	—
2006	2,197	0	0	2,197	—	—
2007	2,101	0	0	2,101	—	—
2008	1,763	0	0	1,763	—	—
2009	404	0	0	404	—	—
Projected Total	448,113	189,498	18,262	655,873	309,116	300,760
K N Energy Inc						
1990	73,006	0	3,240	76,246	—	—
1991	62,785	0	3,240	66,025	—	—
1992	56,246	0	3,040	59,286	—	—
1993	46,747	0	3,040	49,787	—	—
1994	39,404	0	1,227	40,631	—	—
1995	34,552	0	40	34,592	—	—
1996	32,082	0	40	32,122	—	—
1997	39,422	0	40	39,462	—	—
1998	38,148	0	40	38,188	—	—
1999	36,907	0	40	36,947	—	—

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
			K N Energy Inc			
2000	46,246	0	40	46,286	—	—
2001	39,392	0	40	39,432	—	—
2002	34,033	0	40	34,073	—	—
2003	29,743	0	40	29,783	—	—
2004	26,010	0	40	26,050	—	—
2005	22,875	0	40	22,915	—	—
2006	19,594	0	40	19,634	—	—
2007	17,514	0	37	17,551	—	—
2008	15,631	0	0	15,631	—	—
2009	13,943	0	0	13,943	—	—
Projected Total	724,280	0	14,304	738,584	78,246	78,246
			Kentucky West Va Gas Co			
1990	21,813	0	0	21,813	—	—
1991	21,813	0	0	21,813	—	—
1992	21,813	0	0	21,813	—	—
1993	21,813	0	0	21,813	—	—
1994	21,813	0	0	21,813	—	—
1995	21,813	0	0	21,813	—	—
1996	21,813	0	0	21,813	—	—
1997	21,813	0	0	21,813	—	—
1998	21,813	0	0	21,813	—	—
1999	21,813	0	0	21,813	—	—
2000	21,813	0	0	21,813	—	—
2001	21,813	0	0	21,813	—	—
2002	21,813	0	0	21,813	—	—
2003	21,813	0	0	21,813	—	—
2004	20,160	0	0	20,160	—	—
2005	0	0	0	0	—	—
2006	0	0	0	0	—	—
2007	0	0	0	0	—	—
2008	0	0	0	0	—	—
2009	0	0	0	0	—	—
Projected Total	325,542	0	0	325,542	21,813	0
			Lone Star Gas Co Div Enserch Corp			
1990	14,732	0	0	14,732	—	—
1991	12,673	0	0	12,673	—	—
1992	10,913	0	0	10,913	—	—
1993	9,210	0	0	9,210	—	—
1994	7,386	0	0	7,386	—	—
1995	5,822	0	0	5,822	—	—
1996	4,807	0	0	4,807	—	—
1997	4,157	0	0	4,157	—	—
1998	3,609	0	0	3,609	—	—
1999	3,165	0	0	3,165	—	—
2000	2,423	0	0	2,423	—	—
2001	1,805	0	0	1,805	—	—
2002	1,636	0	0	1,636	—	—
2003	1,304	0	0	1,304	—	—
2004	1,174	0	0	1,174	—	—
2005	1,022	0	0	1,022	—	—
2006	903	0	0	903	—	—
2007	821	0	0	821	—	—
2008	745	0	0	745	—	—
2009	313	0	0	313	—	—

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Lone Star Gas Co Div Enserch Corp						
Projected Total	88,620	0	0	88,620	17,718	15,371
Mid Louisiana Gas Co						
1990	18,274	0	0	18,274	--	--
1991	13,309	0	0	13,309	--	--
1992	10,637	0	0	10,637	--	--
1993	8,599	0	0	8,599	--	--
1994	7,019	0	0	7,019	--	--
1995	5,748	0	0	5,748	--	--
1996	4,662	0	0	4,662	--	--
1997	3,885	0	0	3,885	--	--
1998	3,311	0	0	3,311	--	--
1999	2,854	0	0	2,854	--	--
2000	2,450	0	0	2,450	--	--
2001	2,106	0	0	2,106	--	--
2002	1,774	0	0	1,774	--	--
2003	1,532	0	0	1,532	--	--
2004	1,368	0	0	1,368	--	--
2005	1,222	0	0	1,222	--	--
2006	1,072	0	0	1,072	--	--
2007	916	0	0	916	--	--
2008	1	0	0	1	--	--
2009	0	0	0	0	--	--
Projected Total	90,739	0	0	90,739	20,974	55,659
Mississippi River Transmission Corp						
1990	111,394	0	18,554	129,948	--	--
1991	106,552	0	15,438	123,990	--	--
1992	89,979	0	147	90,126	--	--
1993	86,070	0	97	86,167	--	--
1994	78,983	0	64	79,047	--	--
1995	76,175	0	50	76,225	--	--
1996	74,818	0	43	74,861	--	--
1997	73,650	0	36	73,686	--	--
1998	72,592	0	24	72,616	--	--
1999	11,467	0	23	11,490	--	--
2000	5,092	0	21	5,113	--	--
2001	4,369	0	15	4,384	--	--
2002	3,793	0	14	3,807	--	--
2003	3,113	0	12	3,125	--	--
2004	2,626	0	12	2,638	--	--
2005	2,246	0	11	2,257	--	--
2006	1,597	0	11	1,608	--	--
2007	1,245	0	10	1,255	--	--
2008	1,122	0	10	1,132	--	--
2009	1,015	0	6	1,021	--	--
Projected Total	809,696	0	34,598	844,496	104,501	0

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
National Fuel Gas Supply Corp						
1990	12,686	0	162,557	175,243	--	--
1991	12,584	0	160,055	172,639	--	--
1992	12,491	0	137,185	149,676	--	--
1993	12,402	0	130,055	142,457	--	--
1994	12,260	0	130,055	142,315	--	--
1995	11,847	0	126,809	138,656	--	--
1996	11,461	0	126,809	138,270	--	--
1997	11,099	0	126,809	137,908	--	--
1998	10,759	0	126,809	137,568	--	--
1999	10,440	0	126,809	137,249	--	--
2000	10,139	0	126,809	136,948	--	--
2001	9,855	0	106,794	116,649	--	--
2002	9,586	0	1,328	10,914	--	--
2003	9,332	0	1,328	10,660	--	--
2004	9,091	0	430	9,521	--	--
2005	8,861	0	430	9,291	--	--
2006	8,644	0	0	8,644	--	--
2007	8,436	0	0	8,436	--	--
2008	8,239	0	0	8,239	--	--
2009	8,050	0	0	8,050	--	--
Projected Total	[illegible]262	0	1,591,071	1,799,333	165,187	0
Natural Gas Pipeline Co of America						
1990	227,321	39,390	89,127	355,838	--	--
1991	171,707	16,335	31,571	219,613	--	--
1992	131,518	14,418	26,095	172,032	--	--
1993	86,604	6,559	20,620	113,784	--	--
1994	58,475	758	15,145	74,378	--	--
1995	47,302	528	10,585	58,415	--	--
1996	39,403	453	10,585	50,441	--	--
1997	31,527	391	10,585	42,503	--	--
1998	17,297	341	10,585	28,223	--	--
1999	15,867	297	10,585	26,750	--	--
2000	13,349	112	10,585	24,047	--	--
2001	7,017	0	10,585	17,602	--	--
2002	5,361	0	10,585	15,946	--	--
2003	4,034	0	10,585	14,619	--	--
2004	3,096	0	10,585	13,681	--	--
2005	2,462	0	10,585	13,047	--	--
2006	1,980	0	10,585	12,565	--	--
2007	1,628	0	10,585	12,213	--	--
2008	1,280	0	10,585	11,865	--	--
2009	1,052	0	6,141	7,194	--	--
Projected Total	868,280	79,582	336,889	1,284,756	355,838	373,279
Northern Natural Div InterNorth Inc						
1990	322,773	1,262	154,388	478,423	--	--
1991	88,837	980	145,406	235,223	--	--
1992	76,844	738	145,306	222,888	--	--
1993	60,419	556	36,326	97,301	--	--
1994	69,354	450	0	69,804	--	--
1995	62,741	413	0	63,154	--	--
1996	52,520	350	0	52,870	--	--
1997	45,061	297	0	45,358	--	--
1998	38,611	257	0	38,868	--	--
1999	33,885	188	0	34,073	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Northern Natural Div InterNorth Inc						
2000	30,140	127	0	30,267	--	--
2001	26,477	111	0	26,588	--	--
2002	23,727	84	0	23,811	--	--
2003	21,196	76	0	21,272	--	--
2004	18,947	67	0	19,014	--	--
2005	17,434	61	0	17,495	--	--
2006	16,071	54	0	16,125	--	--
2007	14,878	46	0	14,924	--	--
2008	13,004	41	0	13,045	--	--
2009	11,972	38	0	12,010	--	--
Projected Total	1,044,891	6,196	481,426	1,532,513	372,211	590,745
Northwest Pipeline Corp						
1990	48,815	0	44,560	93,375	--	--
1991	31,242	0	44,560	75,802	--	--
1992	21,676	0	44,560	66,236	--	--
1993	19,922	0	44,560	64,482	--	--
1994	18,342	0	44,560	62,902	--	--
1995	16,955	0	44,560	61,515	--	--
1996	15,705	0	44,560	60,265	--	--
1997	14,577	0	44,560	59,137	--	--
1998	13,556	0	44,560	58,116	--	--
1999	12,628	0	44,560	57,188	--	--
2000	11,783	0	44,560	56,343	--	--
2001	11,010	0	44,560	55,570	--	--
2002	10,303	0	44,560	54,863	--	--
2003	9,654	0	44,560	54,214	--	--
2004	9,057	0	7,019	16,076	--	--
2005	8,507	0	0	8,507	--	--
2006	7,999	0	0	7,999	--	--
2007	7,530	0	0	7,530	--	--
2008	7,095	0	0	7,095	--	--
2009	6,691	0	0	6,691	--	--
Projected Total	303,047	0	630,859	933,906	48,325	90,991
Panhandle Eastern Pipe Line Co						
1990	39,171	5,903	95,334	140,408	--	--
1991	36,934	7,261	88,522	132,717	--	--
1992	35,623	7,280	88,027	130,930	--	--
1993	30,267	7,261	79,174	116,702	--	--
1994	24,347	2,466	63,928	90,741	--	--
1995	20,233	0	40,836	61,069	--	--
1996	17,381	0	20,030	37,411	--	--
1997	15,273	0	2,394	17,667	--	--
1998	12,629	0	483	13,112	--	--
1999	10,748	0	310	11,058	--	--
2000	7,574	0	256	7,830	--	--
2001	6,671	0	238	6,909	--	--
2002	5,995	0	89	6,084	--	--
2003	5,400	0	68	5,468	--	--
2004	4,830	0	59	4,889	--	--
2005	4,394	0	52	4,446	--	--
2006	3,978	0	45	4,023	--	--
2007	3,700	0	41	3,741	--	--
2008	3,410	0	36	3,446	--	--
2009	3,060	0	31	3,091	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Panhandle Eastern Pipe Line Co						
Projected Total	291,618	30,171	479,953	801,742	104,488	341,533
Questar Pipeline Company						
1990	40,826	6,913	545	48,284	—	—
1991	34,842	5,433	545	40,820	—	—
1992	29,951	4,311	408	34,670	—	—
1993	25,915	3,454	0	29,369	—	—
1994	22,562	2,797	0	25,359	—	—
1995	19,702	2,288	0	21,990	—	—
1996	17,120	1,885	0	19,005	—	—
1997	14,936	1,514	0	16,450	—	—
1998	13,145	1,276	0	14,421	—	—
1999	11,641	1,085	0	12,726	—	—
2000	10,320	930	0	11,250	—	—
2001	9,179	805	0	9,984	—	—
2002	8,159	700	0	8,859	—	—
2003	7,236	613	0	7,849	—	—
2004	6,481	541	0	7,022	—	—
2005	5,810	478	0	6,288	—	—
2006	5,222	425	0	5,647	—	—
2007	4,742	379	0	5,121	—	—
2008	4,192	338	0	4,530	—	—
2009	3,725	300	0	4,025	—	—
Projected Total	295,706	36,465	1,498	333,669	51,234	206,225
Ringwood Gathering Co						
1990	7,161	0	0	7,161	—	—
1991	6,176	0	0	6,176	—	—
1992	5,299	0	0	5,299	—	—
1993	4,476	0	0	4,476	—	—
1994	3,849	0	0	3,849	—	—
1995	3,222	0	0	3,222	—	—
1996	2,730	0	0	2,730	—	—
1997	2,291	0	0	2,291	—	—
1998	1,969	0	0	1,969	—	—
1999	1,683	0	0	1,683	—	—
2000	0	0	0	0	—	—
2001	0	0	0	0	—	—
2002	0	0	0	0	—	—
2003	0	0	0	0	—	—
2004	0	0	0	0	—	—
2005	0	0	0	0	—	—
2006	0	0	0	0	—	—
2007	0	0	0	0	—	—
2008	0	0	0	0	—	—
2009	0	0	0	0	—	—
Projected Total	38,856	0	0	38,856	0	0

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Sea Robin Pipeline Co						
1990	27	0	0	27	—	—
1991	0	0	0	0	—	—
1992	0	0	0	0	—	—
1993	0	0	0	0	—	—
1994	0	0	0	0	—	—
1995	0	0	0	0	—	—
1996	0	0	0	0	—	—
1997	0	0	0	0	—	—
1998	0	0	0	0	—	—
1999	0	0	0	0	—	—
2000	0	0	0	0	—	—
2001	0	0	0	0	—	—
2002	0	0	0	0	—	—
2003	0	0	0	0	—	—
2004	0	0	0	0	—	—
2005	0	0	0	0	—	—
2006	0	0	0	0	—	—
2007	0	0	0	0	—	—
2008	0	0	0	0	—	—
2009	0	0	0	0	—	—
Projected Total	27	0	0	27	27	61,613
Southern Natural Gas Co						
1990	249,459	0	0	249,459	—	—
1991	223,065	0	0	223,065	—	—
1992	176,793	0	0	176,793	—	—
1993	114,768	0	0	114,768	—	—
1994	76,271	0	7,300	83,571	—	—
1995	62,051	0	7,300	69,351	—	—
1996	45,947	0	7,320	53,267	—	—
1997	33,989	0	7,300	41,289	—	—
1998	22,759	0	0	22,759	—	—
1999	14,904	0	0	14,904	—	—
2000	11,416	0	0	11,416	—	—
2001	9,482	0	0	9,482	—	—
2002	8,557	0	0	8,557	—	—
2003	5,561	0	0	5,561	—	—
2004	2,250	0	0	2,250	—	—
2005	1,736	0	0	1,736	—	—
2006	1,399	0	0	1,399	—	—
2007	1,095	0	0	1,095	—	—
2008	7,297	0	0	7,297	—	—
2009	6,262	0	0	6,262	—	—
Projected Total	1,075,061	0	29,220	1,104,281	130,000	719,846
Tennessee Gas Pipeline Div Tenneco						
1990	549,357	0	86,067	635,424	—	—
1991	406,712	0	100,690	507,402	—	—
1992	296,894	0	100,521	397,415	—	—
1993	218,754	0	140,631	359,385	—	—
1994	167,426	0	140,324	307,750	—	—
1995	130,825	0	133,211	264,036	—	—
1996	103,900	0	122,813	226,713	—	—
1997	81,029	0	109,616	190,645	—	—
1998	63,022	0	78,155	141,177	—	—
1999	50,480	0	66,686	117,166	—	—

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Tennessee Gas Pipeline Div Tenneco						
2000	41,008	0	17,703	58,711	--	--
2001	32,892	0	16,316	49,208	--	--
2002	25,055	0	16,316	41,371	--	--
2003	21,266	0	16,316	37,582	--	--
2004	17,890	0	16,316	34,206	--	--
2005	15,718	0	16,316	32,034	--	--
2006	12,333	0	12,403	24,736	--	--
2007	10,973	0	0	10,973	--	--
2008	9,272	0	0	9,272	--	--
2009	8,373	0	0	8,373	--	--
Projected Total	2,263,179	0	1,190,400	3,453,579	210,300	1,083,549
Texas Eastern Transmission Corp						
1990	693,278	0	180,382	873,660	--	--
1991	552,522	0	118,906	671,428	--	--
1992	456,744	0	27,755	486,499	--	--
1993	348,335	0	27,656	375,991	--	--
1994	266,227	0	27,634	293,861	--	--
1995	215,653	0	27,613	243,266	--	--
1996	171,545	0	26,761	198,306	--	--
1997	120,309	0	20,985	141,294	--	--
1998	87,819	0	14,654	102,473	--	--
1999	62,711	0	0	62,711	--	--
2000	43,607	0	0	43,607	--	--
2001	25,595	0	0	25,595	--	--
2002	12,005	0	0	12,005	--	--
2003	8,209	0	0	8,209	--	--
2004	5,075	0	0	5,075	--	--
2005	2,850	0	0	2,850	--	--
2006	2,155	0	0	2,155	--	--
2007	1,847	0	0	1,847	--	--
2008	1,595	0	0	1,595	--	--
2009	1,137	0	0	1,137	--	--
Projected Total	3,081,218	0	472,346	3,553,564	536,684	1,092,925
Texas Gas Transmission Corp						
1990	201,512	0	75,908	277,420	--	--
1991	181,153	0	71,055	252,208	--	--
1992	136,631	0	66,543	203,174	--	--
1993	101,977	0	62,346	164,323	--	--
1994	75,811	0	58,442	134,253	--	--
1995	49,890	0	54,813	104,703	--	--
1996	37,275	0	51,437	88,712	--	--
1997	32,509	0	48,297	80,806	--	--
1998	26,665	0	45,377	72,042	--	--
1999	17,787	0	42,662	60,449	--	--
2000	16,106	0	40,137	56,243	--	--
2001	14,061	0	37,327	51,388	--	--
2002	13,352	0	34,714	48,066	--	--
2003	12,679	0	32,284	44,963	--	--
2004	12,040	0	30,025	42,065	--	--
2005	11,433	0	27,923	39,356	--	--
2006	10,856	0	25,968	36,824	--	--
2007	10,309	0	24,150	34,459	--	--
2008	9,789	0	22,459	32,248	--	--
2009	9,295	0	20,887	30,182	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Texas Gas Transmission Corp						
Projected Total	981,130	0	872,754	1,853,884	192,048	762,244
Transcontinental Gas Pipe Line Corp						
1990	584,597	0	14,739	599,336	--	--
1991	456,298	0	14,497	470,795	--	--
1992	301,000	0	13,448	314,448	--	--
1993	213,696	0	13,140	226,836	--	--
1994	143,642	0	13,140	156,782	--	--
1995	80,991	0	0	80,991	--	--
1996	51,206	0	0	51,206	--	--
1997	40,284	0	0	40,284	--	--
1998	29,277	0	0	29,277	--	--
1999	19,279	0	0	19,279	--	--
2000	14,791	0	0	14,791	--	--
2001	11,133	0	0	11,133	--	--
2002	6,801	0	0	6,801	--	--
2003	4,542	0	0	4,542	--	--
2004	4,323	0	0	4,323	--	--
2005	3,117	0	0	3,117	--	--
2006	2,273	0	0	2,273	--	--
2007	2,257	0	0	2,257	--	--
2008	1,520	0	0	1,520	--	--
2009	1,058	0	0	1,058	--	--
Projected Total	1,972,085	0	68,964	2,041,049	250,000	1,127,424
Transwestern Pipeline Co						
1990	43,705	0	0	43,705	--	--
1991	43,705	0	0	43,705	--	--
1992	43,705	0	0	43,705	--	--
1993	43,705	0	0	43,705	--	--
1994	43,705	0	0	43,705	--	--
1995	43,705	0	0	43,705	--	--
1996	40,174	0	0	40,174	--	--
1997	32,757	0	0	32,757	--	--
1998	27,674	0	0	27,674	--	--
1999	22,545	0	0	22,545	--	--
2000	18,859	0	0	18,859	--	--
2001	16,282	0	0	16,282	--	--
2002	14,128	0	0	14,128	--	--
2003	12,177	0	0	12,177	--	--
2004	10,690	0	0	10,690	--	--
2005	9,272	0	0	9,272	--	--
2006	8,092	0	0	8,092	--	--
2007	7,182	0	0	7,182	--	--
2008	6,229	0	0	6,229	--	--
2009	3,972	0	0	3,972	--	--
Projected Total	492,263	0	0	492,263	43,705	0

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Trunkline Gas Co						
1990	144,086	0	0	144,086	--	--
1991	120,191	0	0	120,191	--	--
1992	118,975	0	0	118,975	--	--
1993	87,318	0	0	87,318	--	--
1994	43,440	0	0	43,440	--	--
1995	26,122	0	0	26,122	--	--
1996	17,030	0	0	17,030	--	--
1997	8,322	0	0	8,322	--	--
1998	1,488	0	0	1,488	--	--
1999	930	0	0	930	--	--
2000	783	0	0	783	--	--
2001	754	0	0	754	--	--
2002	243	0	0	243	--	--
2003	185	0	0	185	--	--
2004	168	0	0	168	--	--
2005	152	0	0	152	--	--
2006	139	0	0	139	--	--
2007	127	0	0	127	--	--
2008	115	0	0	115	--	--
2009	106	0	0	106	--	--
Projected Total	570,674	0	0	570,674	102,643	265,927
United Gas Pipe Line Co						
1990	25,092	0	13	25,105	--	--
1991	25,105	0	0	25,105	--	--
1992	25,105	0	0	25,105	--	--
1993	25,105	0	0	25,105	--	--
1994	18,758	0	0	18,758	--	--
1995	13,277	0	0	13,277	--	--
1996	9,400	0	0	9,400	--	--
1997	7,162	0	0	7,162	--	--
1998	5,407	0	0	5,407	--	--
1999	3,667	0	0	3,667	--	--
2000	3,336	0	0	3,336	--	--
2001	2,444	0	0	2,444	--	--
2002	1,529	0	0	1,529	--	--
2003	840	0	0	840	--	--
2004	572	0	0	572	--	--
2005	455	0	0	455	--	--
2006	359	0	0	359	--	--
2007	288	0	0	288	--	--
2008	230	0	0	230	--	--
2009	190	0	0	190	--	--
Projected Total	168,321	0	13	168,334	25,105	1,069,521
Williams Natural Gas Co						
1990	114,832	0	2,566	117,398	--	--
1991	96,845	0	2,566	99,411	--	--
1992	87,668	0	1,820	89,488	--	--
1993	87,672	0	1,815	89,487	--	--
1994	87,023	0	1,815	88,838	--	--
1995	86,306	0	1,815	88,121	--	--
1996	84,306	0	1,820	86,126	--	--
1997	79,404	0	1,815	81,219	--	--
1998	74,477	0	1,815	76,292	--	--
1999	71,223	0	1,815	73,038	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Williams Natural Gas Co						
2000	65,827	0	1,820	67,647	—	—
2001	61,194	0	1,815	63,009	—	—
2002	56,935	0	1,815	58,750	—	—
2003	53,037	0	354	53,391	—	—
2004	49,578	0	0	49,578	—	—
2005	46,304	0	0	46,304	—	—
2006	43,182	0	0	43,182	—	—
2007	40,440	0	0	40,440	—	—
2008	37,991	0	0	37,991	—	—
2009	35,690	0	0	35,690	—	—
Projected Total	1,359,934	0	25,466	1,385,400	117,398	117,398
Williston Basin Interstate Pipeline						
1990	21,452	0	0	21,452	—	—
1991	16,851	0	0	16,851	—	—
1992	13,287	0	0	13,287	—	—
1993	8,458	0	0	8,458	—	—
1994	5,035	0	0	5,035	—	—
1995	5,000	0	0	5,000	—	—
1996	4,780	0	0	4,780	—	—
1997	4,460	0	0	4,460	—	—
1998	4,260	0	0	4,260	—	—
1999	3,780	0	0	3,780	—	—
2000	3,360	0	0	3,360	—	—
2001	3,335	0	0	3,335	—	—
2002	2,950	0	0	2,950	—	—
2003	2,750	0	0	2,750	—	—
2004	2,680	0	0	2,680	—	—
2005	2,630	0	0	2,630	—	—
2006	2,580	0	0	2,580	—	—
2007	2,530	0	0	2,530	—	—
2008	2,490	0	0	2,490	—	—
2009	2,450	0	0	2,450	—	—
Projected Total	115,118	0	0	115,118	21,452	0

— = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 17. Composite Deliverability Projections[a]
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
1990	5,274,204	251,077	1,602,120	7,127,401	—	—
1991	4,300,435	37,411	1,429,342	5,767,188	—	—
1992	3,580,187	35,178	1,286,043	4,901,409	—	—
1993	2,944,368	25,119	1,190,811	4,160,299	—	—
1994	2,394,602	13,899	1,135,361	3,543,862	—	—
1995	2,000,822	10,751	1,070,741	3,082,314	—	—
1996	1,696,491	10,260	1,036,890	2,743,641	—	—
1997	1,445,486	9,917	996,195	2,451,598	—	—
1998	1,225,892	9,697	946,525	2,182,114	—	—
1999	982,000	9,470	917,780	1,909,251	—	—
2000	792,667	9,117	867,667	1,669,452	—	—
2001	670,495	8,913	842,495	1,521,903	—	—
2002	574,644	8,832	734,486	1,317,962	—	—
2003	504,162	8,765	730,794	1,243,721	—	—
2004	424,683	8,720	691,105	1,124,508	—	—
2005	355,116	8,695	680,969	1,044,780	—	—
2006	310,258	8,663	674,834	993,755	—	—
2007	274,831	8,648	660,747	944,226	—	—
2008	251,825	8,628	660,333	920,786	—	—
2009	219,837	8,597	642,440	870,875	—	—
Projected Total	30,223,005	500,357	18,797,678	49,521,045	4,994,273	11,922,148

[a] Interstate Pipelines required to file Schedule I of the Form 15. Includes 34 pipeline companies with both company-owned and contracted reserves. See Appendix B.

— = Not Applicable

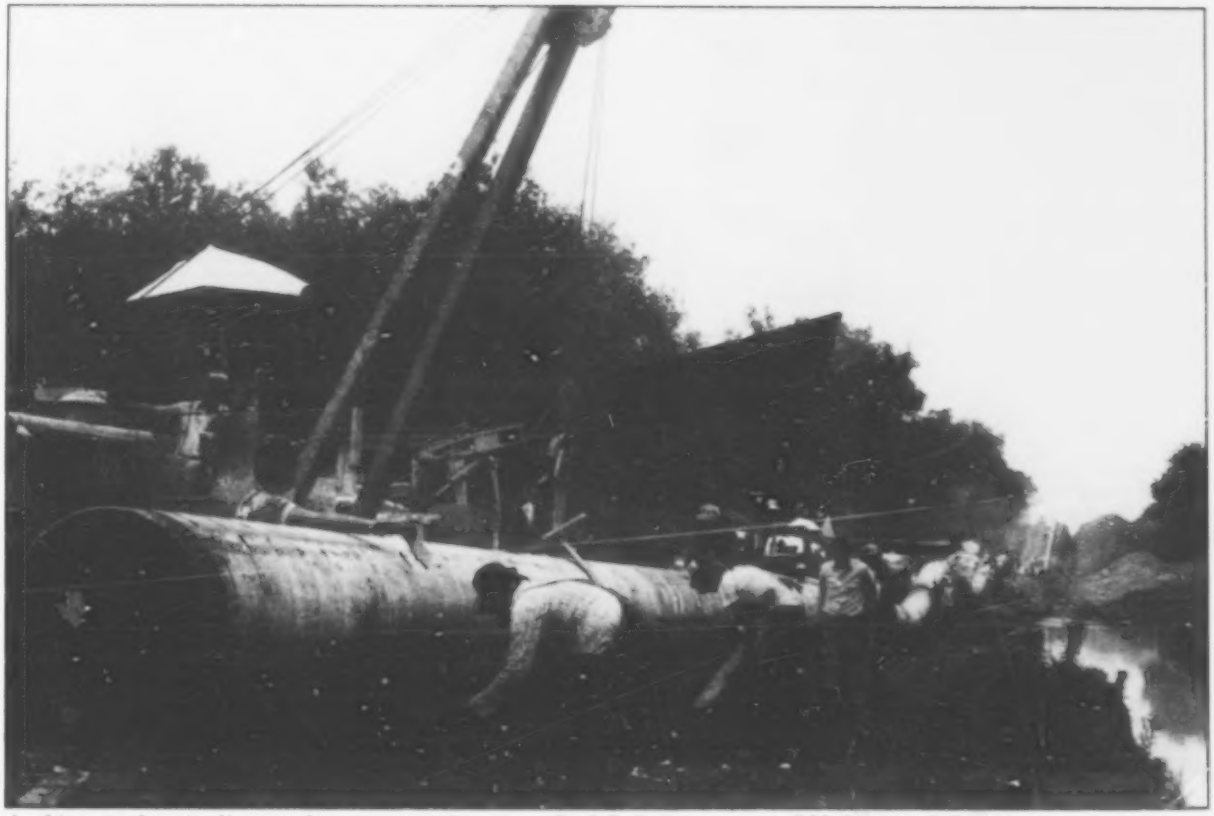
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Pipeline Imports

Interstate pipeline companies required to file Form 15 reported imports of natural gas into the United States of 778,904 million cubic feet from Canada during 1989. Imports from Mexico have been zero since 1985.

The remaining gas supply under contract between Form 15 respondents and Canadian firms increased by 38.9 percent, from 9.7 trillion cubic feet in 1988 to 13.4 trillion cubic feet in 1989. In comparison, the Mexican gas supply remaining under contract decreased from 0.4 trillion cubic feet in 1988 to 0.3 trillion cubic feet in 1989 (Table 18).

The importation of natural gas from Canada continues to be an important part of the interstate pipeline companies' actions to procure supplemental supplies of natural gas to augment domestic gas supply.



A thirty-inch pipeline under construction near Red Oak in eastern Oklahoma. Arkansas Louisiana Gas Co.

Table 18. Pipeline Imports
(Million Cubic Feet)

Importing Company	1988	1989
Canadian Gas		
Contracted Gas Supply		
ANR Pipeline Co	33,450	88,200
Boundary Gas Inc	229,583	217,840
Granite State Gas Transmission Inc	89,725	82,875
Great Lakes Gas Transmission Co	222,910	118,014
Inter-City Minnesota Pipelines Ltd	56,371	48,399
Midwestern Gas Transmission Co	349,681	0
Natural Gas Pipeline Co of America	104,925	77,551
Northern Natural Div InterNorth Inc	20,457	154,487
Northwest Alaskan Pipeline Co	6,130,800	5,459,200
Northwest Pipeline Corp	37,088	630,859
Pacific Gas Transmission Co	1,974,868	5,700,123
Tennessee Gas Pipeline Div Tenneco	379,705	618,457
Texas Eastern Transmission Corp	34,160	226,499
Total	9,663,721	13,422,504
Annual Imports		
Boundary Gas Inc	32,317	33,287
Granite State Gas Transmission Inc	2,240	6,872
Great Lakes Gas Transmission Co	93,833	76,116
Inter-City Minnesota Pipelines Ltd	4,211	4,307
Midwestern Gas Transmission Co	22,654	7,115
Natural Gas Pipeline Co of America	28,096	25,865
Northern Natural Div InterNorth Inc	47,008	17,803
Northwest Alaskan Pipeline Co	210,465	188,665
Northwest Pipeline Corp	30,367	15,953
Pacific Gas Transmission Co	381,953	383,260
Tennessee Gas Pipeline Div Tenneco	18,524	5,185
Texas Eastern Transmission Corp	18,164	14,476
Total	889,832	778,904
Mexican Gas		
Contracted Gas Supply		
Border Gas Inc	352,922	287,547
Total	352,922	287,547
Annual Imports		
Total	0	0

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Appendix A

Summary of Data Collection Operations and Report Methodology

Appendix A

Summary of Data Collection Operations and Report Methodology

Data for the *Gas Supplies of Interstate Natural Gas Pipeline Companies 1989*, are based on the FERC Form 15, "Interstate Pipelines' Annual Report of Gas Supply." This form is filed annually on April 1 of the year following the report year.

Survey Design

The survey was implemented in 1963 by the FPC. The FERC assumed jurisdictional authority for the survey on October 1, 1977, as a result of the Department of Energy Organization Act; and simultaneously the EIA was given the responsibility for the collection, processing, and publication of the data gathered by the survey.

The survey universe varies slightly from year to year. The FERC required 74 interstate pipeline companies to file Form 15 in 1990 for report year 1989. On December 15, 1989, the Reserves and Natural Gas Division of the Office of Oil and Gas, EIA, mailed report year 1989 forms to all respondents identified by the FERC. Completed forms and machine-readable submissions were returned to the Reserves and Natural Gas Division where they were processed.

Response Statistics

Data for the report year 1989 were due April 1, 1990. The response rate as of April 13, 1990, was approximately 86 percent. Extensions of up to 30 days are generally granted upon receipt of a formal written request provided the respondent is not currently involved in FERC hearings.

Approximately 2 percent of the respondents submitted an amended Form 15 to correct major reporting errors. An additional 2 percent resubmitted partial data to replace erroneous data submitted initially. The final response rate was 100 percent.

Respondents may file on magnetic tape provided that a printout reasonably conforming in format to the Form 15 is also filed. All major companies submitted their 1989 data on magnetic tape or other electronic media.

Summary of Data Reporting Requirements

The FERC Form 15 (see Figure A1) is a multipage form consisting of seven major parts. Additionally, as part of the filing requirement, each company is required to submit a general map covering the producing areas traversed by the pipeline system and a map for each field unless previously submitted. The major parts of the form include an Identification Schedule, Synopsis of Gas Supply, Disclosure of Other Gas Supply Filings with Federal Agencies, Gas Procurement Activity Statement, Schedule I, Schedule II, and Footnote Data. Companies that have year-end remaining recoverable reserves of more than 50 billion cubic feet of company-owned and independent producer contract reserves are required to complete the entire form and provide the specified maps. The remaining respondents are required to file only the Identification Schedule, the Synopsis of Gas Supply, and Schedule II. Companies that act as transporters only are required to file a statement providing the names and addresses of the company or companies for which gas is transported.

The data provided in this report are derived from the Synopsis of Gas Supply, Schedule I, and Schedule II. The Synopsis of Gas Supply and the Schedule I contain summary level reserves and production data reflective of the detail information contained in Schedule II. The Synopsis of Gas Supply and the Schedule I consist of a single page for each. All volumes reported on these

two forms are on a dry basis at 14.73 psia and 60 degrees Fahrenheit.

Each source of supply is reported in Schedule II. The Schedule II format allows a maximum of five sources to be reported on each page, therefore Schedule II submissions may vary from one page to many.

Data Quality Assurance Procedures

Individual company reports were initially reviewed by analysts to check for correct reporting procedures, proper format, correct company identification, and data consistency between the Synopsis of Gas Supply, Schedule I, and, for small companies, Schedule II. Data completeness and intraschedule consistency checking were also performed. Errors were detected in 44 percent of the submissions during this review phase. Each respondent whose submission contained an error was contacted by telephone and informed of the error and instructed on the correct filing procedure. If corrections were determined to be extensive, the respondent was asked to prepare and submit an amended Form 15 or the portions thereof which were in error.

Following conclusion of the manual review phase, edits were performed to insure that gas supply sources were properly identified and that mathematical calculations were correct and consistent within and between schedules. Errors were detected in 74 percent of the submissions during the automated editing phase of form review. Respondents whose filings were found to contain errors were telephoned for problem resolution.

Comparison of the Form 15 with Other Data Sources

The Form 15 data on imports from Canada and Mexico (Table 18) were compared with data collected on the FPC Form 14 and published in the *Natural Gas Monthly*.[1] There are differences between the reports due to the fact that the Form 15 is submitted earlier than the FPC-14, and the FERC-15 reports estimated volumes while the FPC-14 is filed later and reports the final volumes.

[1]Energy Information Administration, "U.S. *Imports and Exports* of Natural Gas, 1989," *Natural Gas Monthly*, June 1990, DOE/EIA-0130(90/06), (Washington, D.C. August 1990).

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Identification Schedule

IDENTIFICATION

1. Exact Legal Name of Respondent (Company)	2. Company Code	3. Report Year 19[ ][ ]
4. Address of Principal Business Office at End of Report Year (Street, City, State, Zip Code)		
5. Name of Contact Person	6. Title of Contact Person	
7. Address of Contact Person (Street, City, State, Zip Code)		
8. Telephone of Contact Person (Including Area Code)	9. Date of Submission (Mo, Da, Yr) Mo [ ][ ] Da [ ][ ] Yr [ ][ ]	

10. What is the total number of pages submitted for each schedule?

Schedule (01)	Page Number (02)	Total Number of Pages (03)
(1) Synopsis of Gas Supply	0002	
(2) Disclosure of Other Gas Supply Filings with Federal Agencies	0003	
(3) Gas Procurement Activity Statement	0004	
(4) Schedule I: System Deliverability Summary		
(5) Schedule II: Committed Reserves and Deliverability Estimates for All Supply Sources		
(6) Footnote Data		
(7) Pipeline System Maps *(See instructions)*		

CERTIFICATION

The undersigned certifies that he/she has examined the Synopsis of Gas Supply and the accompanying report; that to the best of his/her knowledge, information, and belief, all statement of fact contained in said report are true and the said report is a correct statement of the gas supply of the above-named respondent in respect to each and every matter set forth therein during the period from and including January 1 to and including December 31 of the report year.

11. Name	12. Title	13. Signature	14. Date Signed (Mo, Da, Yr)

Title 18, U.S.C. 1001, makes it a crime for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Synopsis of Gas Supply

000

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

01	Enter the class of Natural Gas Company, as defined in the "Uniform System of Accounts for Natural Gas Companies." *(See Sources for Codes Used in the instructions)*	
02	Enter the estimated total volume of remaining salable gas supply at the end of the current report year. *(See definition of Gas Supply)*	*(Enter volume)*
03	Enter the total new reserve additions that are reported for the first time in the current report year. *(See definition of Reserve Additions)*	
04	Enter the total new reserve additions acquired through new gas purchase contracts with independent producers during the current report year. *(See definition of Producer Contracted Reserves)*	
05	Enter the total revisions (increases or decreases) to the previous reserve estimates made during the current report year. *(See definition of Revisions)*	+ / -
06	Enter the total volume of company owned recoverable gas in underground storage facilities at the end of the current report year. *(See definitions of Owned Reserves and Underground Storage)*	
07	Enter the gas balance due from exchange agreements (positive or negative) at the end of the current report year. *(See definition of Exchange Agreements)*	+ / -

FERC FORM NO. 15 (REVISED 6-81)

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY
Disclosure of Other Gas Supply Filings with Federal Agencies

Company Code	Company Name (35)	Report Year	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page
		19		☐ Yes

Identify below any public filings concerning the pipeline respondent's total system gas supplies made with other Federal Governmental Agencies by the respondent, its parent or affiliate, after the April 1 filing of the respondent's FERC Form No. 15 for the preceding year of report. (Affiliates are companies or persons that directly or indirectly, through one or more intermediaries, control or are controlled by, or are under control with the respondent company.) Reconciliation is required for that portion of the gas supply data included in the other filing(s) representing the gas supply belonging to the respondent which is different from that reported in the current FERC Form No. 15 filing. If more space is needed, use copies of this schedule.

Line No.	Name of Filing Party (Enter full name) (01)	Name and/or Date of Report (02)	Formal Name of Recipient Government Agency (03)	Reconciliation of Any Gas Reserve Differences (Explain) (04)
01				
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FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Gas Procurement Activity Statement

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

Line No.	*Provide a general statement of the company's gas procurement activity. Identify and include a description of any anticipated future supply additions from pending certificates. Include a general statement concerning current contract negotiations; producer option agreements; advance payment agreements; negotiations with foreign suppliers; construction of facilities to produce, or contracts for, supplies of LNG, SNG, or coal gas; or any other activities to add gas supplies. Also include a statement of the status of exploration and development activity in, or near, the general producing areas traversed by or available to the pipeline system to provide information to be relied upon by respondent with respect to applications for certificates under Section 7(c) of the Natural Gas Act.*
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FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Schedule I

System Deliverability Summary

(See the Instructions for the filing requirements of this Schedule.)

100

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

CURRENT GAS SUPPLY

Line No.	Item (00)	Owned (10) (01)	Producer Contracted (10) (02)	Other Supply Contracts (10) (03)	Interstate Pipeline Purchases (10) (04)	Total (10) *(Enter total of 01, 02, 03 and 04)* (05)
101	Reserves & Other Supply					
102	Volume Purchased and/or Produced					

DELIVERABILITY FORECAST

Line No.	Projected Year (00)	Annual Volume Scheduled: Owned and Producer Contracted (10) (01)	Annual Volume Scheduled: Other Supply Contracts (10) (02)	Annual Volume Scheduled: Interstate Pipeline Purchases (10) (03)	Total (10) *(Enter total of 01, 02, and 03)* (04)	Annual Requirement (10) (05)	Total Certificate Requirement (10) (06)
103							
104							
105							
106							
107							
108							
109							
110							
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112							
113							
114							
115							
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117							
118							
119							
120							
121							
122							
123	TOTAL						

TOTAL REMAINING RESERVES

124	125	126	127
Enter the result of the total of line 101, columns 01, 02 minus line 123, column 01 (101 + 02)–01)	Enter the result of line 101, column 03 minus line 123, column 02.	Enter the result of line 101, column 04 minus line 123, column 03.	Enter the result of line 101, column 05 minus line 123, column 04.

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Schedule II

Committed Reserves and Deliverability Estimates For All Supply Sources

(See the Instructions for filing requirements of this schedule. If more space is needed, use copies of this schedule. Note how Columns A through E of lines 206 to 226 correspond to lines 201 to 205.)

200

Company Code	Company Name (35)	Report Year	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page
		19		☐ Yes

Line No. (00)	Column Alpha (00)	Group (or Field) Code (01)	Group (or Field) Name (26) (02)	Supply Code Type (03)	Supply Code Class (04)	Supply Code Term (05)	State Abb. (06)	County/Parish Code (07)	County/Parish Name (16) (08)	Pipeline (or Seller) Name (26) (09)
201	A									
202	B									
203	C									
204	D									
205	E									

Line No. (00)	Reserves *(Enter in MMCF)* (01)	Column A (for line 201) (02)	Column B (for line 202) (03)	Column C (for line 203) (04)	Column D (for line 204) (05)	Column E (for line 205) (06)
206	Are lines 207 to 209 on a dedicated basis only? *(Enter yes or no)*					
207	Initial Recoverable Wet Gas					
208	Cumulative Wet Gas Production					
209	Remaining Recoverable Wet Gas					
210	Fuel and Shrinkage Factor					
211	Owned and Contracted Remaining Dry Gas					
212	Owned and Contracted Report Year Dry Gas Production/Purchases					
213	Approximate Heating Value (In Btu)					
214	Company Owned Remaining Dry Gas					
215	Company Owned Report Year Dry Gas Production					
216	Additions During Report Year					
217	Net Revisions During Report Year					
218	Owned and Contracted Remaining Nonassociated Dry Gas					
219	Total Number of Reservoirs					
220	Number of Nonproducing Reservoirs					
221	Remaining Total Dry Gas In Nonproducing Reservoirs					
222	Estimated Annual Scheduled Volume – First Year					
223	Estimated Annual Scheduled Volume – Second Year					
224	Estimated Annual Scheduled Volume – Third Year					
225	Estimated Annual Scheduled Volume – Fourth Year					
226	Estimated Annual Scheduled Volume – Fifth Year					

Page ☐ Supplemental Sheet No ☐

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Footnote Data

(Refer to Specific Instructions before completing this schedule. If more space is needed, use copies of this schedule.)

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)

Line No.	Page Number (01)	Supplemental Sheet Number (02)	Data Reference No. Line No. (03)	Data Reference No. Column or Item No. (04)	Classification (05)	Prior Year (06)	Footnote Sequence Number (07)	Footnote Code (08)	Footnote Message (09)
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Appendix B

Index of Jurisdictional Companies

Appendix B

Index of Jurisdictional Companies

Appendix B is an index of interstate pipeline companies subject to the jurisdiction of the FERC under the Natural Gas Act that were required to file the 1989 annual report of gas supply in accordance with the requirements of Section 260.7 of the regulations of the FERC (18 CFR 260.7). Natural gas pipeline companies that have year-end remaining recoverable reserves of more than 50 billion cubic feet of company-owned and independent producer contract reserves, at 14.73 psia and 60 degrees Fahrenheit, are required to complete the entire Form 15 in accordance with Part IV of "General Information" of the "General Instructions." The 34 companies meeting this criterion are as follows:

ANR Pipeline Company

Arkla Incorporated

Carnegie Natural Gas Company

CNG Transmission Corporation

Colorado Interstate Gas Company

Columbia Gas Transmission Corporation

El Paso Natural Gas Company

Equitrans Incorporated

Florida Gas Transmission Company

Kentucky West Virginia Gas Company

K N Energy Incorporated

Lone Star Gas Company Division Enserch Corporation

Louisiana-Nevada Transit Company[4]

Mid Louisiana Gas Company

Mississippi River Transmission Corporation

National Fuel Gas Supply Corporation

Natural Gas Pipeline Company of America

Northern Natural Division InterNorth Incorporated

Northwest Pipeline Corporation

Panhandle Eastern Pipe Line Company

Questar Pipeline Company

Ringwood Gathering Company

Sea Robin Pipeline Company

Southern Natural Gas Company

Tennessee Gas Pipeline Division Tenneco

Texas Eastern Transmission Corporation

Texas Gas Transmission Corporation

Transcontinental Gas Pipe Line Corporation

Transwestern Pipeline Company

Trunkline Gas Company

United Gas Pipe Line Company

Valero Interstate Transmission Company[4]

Williams Natural Gas Company

Williston Basin Interstate Pipeline

[4]Did not file schedule 1 data for 1989.

Natural gas pipeline companies subject to the provisions noted at the beginning of this appendix having year-end remaining, recoverable, salable reserves consisting of 50 billion cubic feet or less of company-owned and independent producer contract reserves at 14.73 psia and 60 degrees Fahrenheit or which purchase their entire supply of gas from another interstate pipeline company, foreign supplier, or supplemental gas source, complete only the Identification Schedule (page 0001), the Synopsis of Gas Supply (page 0002), and Schedule II of Form 15 in accordance with Part IV of "General Information" of the "General Instructions." The companies meeting these criteria are:

Alabama-Tennessee Natural Gas Company
Algonquin Gas Transmission Company[5]
Arkansas Oklahoma Gas Corporation
Associated Natural Gas Company[5]
Bayou Interstate Pipeline System
Bluefield Gas Company[5]
Border Gas Incorporated[5]
Boundary Gas Incorporated[5]
Caprock Pipeline Company
East Tennessee Natural Gas Company
Eastern Shore Natural Gas Company
Gas Transport Incorporated
Glacier Gas Company[5]
Granite State Gas Transmission Incorporated[5]
Great Lakes Gas Transmission Company[5]
Great Plains Natural Gas Company[5]
Indiana Utilities Corporation[5]
Inland Gas Company Incorporated
Inter-City Minnesota Pipelines Limited[5]
International Paper Company
Iowa-Illinois Gas & Electric Company[5]
Michigan Gas Storage Company
Midwestern Gas Transmission Company
MIGC, Incorporated
North Penn Gas Company
Northwest Alaskan Pipeline Company[5]
Ohio River Pipeline Corporation[5]
Orange and Rockland Utilities Incorporated
Pacific Gas Transmission Company
Pacific Interstate Offshore Company
Pacific Interstate Transmission Company
Pacific Offshore Pipeline Company
Pennsylvania & Southern Gas Company
Raton Gas Transmission Co Inc[5]
South Georgia Natural Gas Company[5]
Texas Gas Pipeline Corporation
Viking Gas Transmission Company
Washington Gas Light Company
Western Gas Interstate Company
Zenith Natural Gas Company

[5]Purchased their entire 1989 gas supply from other interstate pipeline companies or foreign suppliers.

Transporters of natural gas are exempt from filing Form 15; however, they are required by the FERC to file a letter, in lieu of the form, listing the name and address of each company for which they transported gas during the report year. Letters were received from the following companies:

Canyon Creek Compression Company

Moraine Pipeline Company

Northern Border Pipeline Company

Pelican Interstate Pipeline System

Sabine Pipeline Company

Stingray Pipeline Company

Trailblazer Pipeline Company

Union Light, Heat & Power Company

Valley Gas Transmissions Inc

Western Transmission Corporation

Wyoming Interstate Company, Ltd

Appendix C

State Subdivisions

Appendix C

State Subdivisions

Louisiana

Northern Louisiana

All of Louisiana north of the 31st parallel including these counties:

Avoyelles	Franklin	Rapides
Bienville	Grant	Red River
Bossier	Jackson	Richland
Caddo	La Salle	Sabine
Caldwell	Lincoln	Tensas
Catahoula	Madison	Union
Claiborne	Morehouse	Vernon
Concordia	Natchitoches	Webster
De soto	Ouachita	West Carroll
East Carroll	Pointe Coupee	Winn

Southern Louisiana

Southern Louisiana - Onshore

Includes all of Louisiana south of the 31st parallel including all or part of the following counties:

Acadia	Iberville	St. James
Allen	Jefferson	St. John the Baptist
Ascension	Jefferson Davis	St. Landry
Assumption	Lafayette	St. Martin
Avoyelles	La Fourche	St. Mary
Beauregard	Livingston	St. Tammany
Calcasieu	Orleans	Tangipahoa
Cameron	Plaquemines	Terrebonne
Concordia	Pointe Coupee	Vermilion
East Baton Rouge	Rapides	Vernon
East Feliciana	St. Bernard	Washington
Evangeline	St. Charles	West Baton Rouge
Iberia	St. Helena	West Feliciana

Southern Louisiana - Offshore

Federal - Offshore

State - Offshore

General - Offshore

New Mexico

New Mexico - Permian Basin Area

Chaves	Eddy	Lea

New Mexico - San Juan Basin Area

McKinley	Rio Arriba	Sandoval
		San Juan

Texas

Texas Railroad Commission District No. 1 (South)

Atascosa
Bastrop
Bexar
Caldwell
Dimmit
Frio
Gonzales
Guadalupe
Kinney
Lasalle
McMullen
Maverick
Medina
Uvalde
Wilson
Zavala

Texas Railroad Commission District No. 1 (North)
Bandera
Bell
Blanco
Burnet
Comal
Edwards
Gillespie
Hays
Kendall
Kerr
Llano
Mason
Milam
Real
Travis
Val Verde
Williamson

Texas Railroad Commission District No. 2
Bee
Calhoun
De Witt
Goliad
Jackson
Karnes
Lavaca
Live Oak
Refugio
Victoria

Texas Railroad Commission District No. 3
Austin
Brazoria
Brazos
Burleson
Chambers
Colorado
Fayette
Ft. Bend
Galveston
Grimes
Hardin
Harris
Jasper
Jefferson
Lee
Liberty
Madison
Matagorda
Montgomery
Newton
Orange
Polk
San Jacinto
Trinity
Tyler
Walker
Waller
Washington
Wharton

Texas Railroad Commission District No. 4
Arkansas
Brooks
Cameron
Duval
Hidalgo
Jim Hogg
Jim Wells
Kenedy
Kleberg
Nueces
San Patricio
Starr
Webb
Willacy
Zapata

Texas Railroad Commission District No. 5
Bosque
Collin
Dallas
Delta
Ellis
Falls
Fannin
Freestone
Henderson
Hill
Hopkins
Hunt
Johnson
Kaufman
Lamar
Leon
Limestone
McLennan
Navarro
Rains
Robertson
Rockwell
Tarrant
Van Zandt

Texas Railroad Commission District No. 6
Anderson
Angelina
Bowie
Camp
Cass
Cherokee
Franklin
Harrison
Houston
Marion
Morris
Nacogdoches
Panola
Red River
Rusk
Sabine
San Augustine
Shelby
Smith
Titus
Upshur

Gregg

Wood

Texas Railroad Commission District No. 7-B

Brown
Callahan
Coleman
Comanche
Coryell
Eastland
Erath
Fisher
Hamilton
Haskell
Hood
Jones
Lampasas
Mills
Nolan
Palo Pinto
Parker
San Saba
Shackelford
Somervell
Stephens
Stonewall
Taylor
Throckmorton

Texas Railroad Commission District No. 7-C

Coke
Concho
Crockett
Irion
Kimble
McCulloch
Menard
Reagan
Runnels
Schleicher
Sutton
Terrell
Tom Green
Upton

Texas Railroad Commission District No. 8

Andrews
Brewster
Crane
Culberson
Ector
El Paso
Glasscock
Howard
Hudspeth
Jeff Davis
Loving
Martin
Midland
Mitchell
Pecos
Presidio
Reeves
Sterling
Ward
Winkler

Texas Railroad Commission District No. 8-A

Bailey
Borden
Cochran
Cottle
Crosby
Dawson
Dickens
Floyd
Gaines
Garza
Hale
Hockley
Kent
King
Lamb
Lubbock
Lynn
Motley
Scurry
Terry
Yoakum

Texas Railroad Commission District No. 9

Archer
Baylor
Clay
Cooke
Denton
Foard
Grayson
Hardeman
Jack
Knox
Montague
Wilbarger
Wichita
Wise
Young

Texas Railroad Commission District No. 10

Armstrong
Briscoe
Carson
Castro
Childress
Collingsworth
Dallam
Deaf Smith
Donley
Gray
Hall
Hansford
Hartley
Hemphill
Hutchinson
Lipscomb
Moore
Ochiltree
Oldham
Parmer
Potter
Randall
Roberts
Sherman
Swisher
Wheeler

Texas - Offshore

Federal - Offshore

State - Offshore

General - Offshore

Appendix D

Selected Recurring Natural Gas and Related Reports

Appendix D

Selected Recurring Natural Gas and Related Reports

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1989*, DOE/EIA-0131(89). September 1990.
- *Statistics of Interstate Natural Gas Pipeline Companies 1988*, DOE/EIA-0145(88), November 1989. Published annually.
- *Natural Gas Monthly*, DOE/EIA-0130. Published monthly.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1989 Annual Report*, DOE/EIA-0216(89), September 1990.
- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Annual Report to Congress 1989*, DOE/EIA-0173(89), March 1990. Published annually.
- *Annual Energy Outlook 1990*, DOE/EIA-0383(90), January 1990. Published annually.
- *Annual Energy Review 1989*, DOE/EIA-0384(89), May 1990. Published annually.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Annual Outlook for Oil and Gas: 1990* DOE/EIA-0517(90), May 1990.
- *International Oil and Gas Exploration and Development Activities*, DOE/EIA-0523. Published Quarterly. Provides a compilation of reported oil and gas reserve additions in foreign countries.

Selected One-Time Natural Gas and Related Reports

- *Drilling and Production Under Title I of the Natural Gas Policy Act, 1978-1986*, DOE/EIA-0448(86), January 1989.
- *An Examination of Domestic Natural Gas Resource Estimates*, SR/RNGD/89-01, February 1989.
- *Growth in Unbundled Natural Gas Transportation Services: 1982-1987*, DOE/EIA-0525, May 1989.
- *Assessment of Pipeline Capacity to Transport Domestic Natural Gas Supplies to the Northeast*, SR/RNGD/89-02, August 1989.
- *Natural Gas Production Responses to a Changing Market Environment, 1978-1988*, DOE/EIA-0532, June 1990.
- *Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations - 1987 through 1989*, DOE/EIA-0185(89), July 1990.
- *U.S. Oil and Gas Reserves by Year of Field Discovery*, DOE/EIA-0534, August 1990.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(89), January 1990.
- *Oil and Gas Field Code Master List, 1989*, EIA-0370(89), January 1990.

Glossary

Annual Requirement: a reporting company's best estimate of its annual requirement for natural gas needed to make direct sales or sales for resale under certificate authorizations and for company use and unaccounted-for gas during the year following the current report year.

Certificate Requirement: the maximum annual volume allowed for sales of natural gas to resale or direct-sale customers under certificate authorization by the FERC. The volume reported should be without regard to FERC-approved curtailment plans.

Coal Gas: substitute natural gas produced synthetically by the chemical reduction of coal at a coal gasification facility.

Dedicated Reserves: as used in this report and defined in Form 15, dedicated reserves are the volume of recoverable, salable gas reserves committed to, controlled by, or possessed by the reporting pipeline company and used for acts and services for which both the seller and the company have received certificate authorization from the FERC. Reserves include both company-owned reserves (including owned gas in underground storage), reserves under contract from independent producers, and short-term and emergency supplies from the intrastate market. Gas volumes under contract from other interstate pipelines are not included as reserves, but may constitute part or all of a company's gas supply.

Deliverability: as used in this report and defined by the FERC in its Order No. 279 (CFR 2.61, 260.7), deliverability "...represents the number of future years during which a pipeline company can meet its annual requirements for its presently certificated delivery capacity from presently committed sources of supply. The availability of gas from these sources of supply shall be governed by the physical capabilities of these sources to deliver gas, by the terms of existing gas-purchase contracts, and by limitations imposed by State or Federal regulatory agencies."

Dry Gas: Natural gas from which the entrained liquids and nonhydrocarbon gases have been removed by lease facilities and/or plant processing. This is the gas that the interstate pipeline purchased, or expects to purchase, to serve its annual requirements.

Gas Supply: For the purpose of this report, the dedicated, recoverable, salable natural gas, including liquefied natural gas (LNG), synthetic natural gas (SNG), and coal gas available to a reporting company from the following:

- company owned reserves
- independent producer contracts
- LNG contracts
- SNG contracts
- gas purchase contracts with other pipeline companies
- commitments with foreign suppliers
- coal gasification contracts
- recoverable gas in underground storage.

Independent Producer: For the purposes of this report, any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale, but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Interstate Pipeline: Any person engaged in natural gas transportation subject to the jurisdiction of the FERC under the Natural Gas Act.

Interstate Pipeline Purchase: Any gas supply contracted from and volumes purchased from other interstate pipelines, overland natural gas import purchases, and LNG, SNG, or coal gas purchases from domestic or foreign sources. Purchases from intrastate pipelines, pursuant to Section 311(b) of the NGPA of 1978, and from independent producers are not included with interstate pipeline purchases.

Intrastate Pipeline: Any person engaged in natural gas transportation (not including gathering) that is not subject to the jurisdiction of the FERC under the Natural Gas Act (other than any such pipeline which is not subject to the jurisdiction of the FERC solely by reason of Section 1(c) of the Natural Gas Act).

Liquefied Natural Gas (LNG): For this report, natural gas which has undergone a phase change to a liquid state and which, before entry into the pipeline stream, must undergo a phase change reversal to the gaseous state.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Nonassociated Gas: Natural gas in reservoirs that do not contain significant quantities of crude oil.

Offshore Reserves and Production: Unless otherwise dedicated, reserves and production that are in either State or Federal domains, located seaward of the coastline.

Other Supply Contracts: Any contracted gas supply other than owned reserves, producer contracted reserves, and interstate pipeline purchases that are used for acts and services for which the company has received certificate authorization from the FERC. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are included with other supply contracts.

Owned Reserves: Any reserve of natural gas that the reporting company owns as a result of oil and gas leases, fee mineral ownership, royalty reservations, or lease or royalty reservations and assignments committed to services under certificate authorizations by the FERC. Company-owned recoverable natural gas in underground storage is classified as owned reserves.

Pipeline Purchases: Gas supply contracted from and volumes purchased from other natural gas companies as defined by the Natural Gas Act, as amended (52 Stat. 821), excluding independent producers, as defined in Paragraph 154.91(a), Chapter I, Title 18 of the Code of Federal Regulations.

Plant or Gas Processing Plant: A facility designed to achieve the recovery of natural gas liquids from the stream of natural gas, which may or may not have been processed through lease separators and field facilities, and to control the quality of the natural gas to be marketed.

Production: Includes gas produced from pipeline company-owned reserves and gas purchased from independent producers.

Report Year: The calendar year, beginning January 1 and ending December 31.

Reserve Additions: The estimated original, recoverable, salable, and new proved reserves credited to new fields, new reservoirs, new gas purchase contracts, amendments to old gas purchase contracts or purchase of gas reserves in-place that occurred during the report year and had not been previously reported. Reserve additions refer to domestic in-the-ground natural gas reserve additions and do not refer to interstate pipeline purchase agreements, contracts with foreign suppliers, coal gas, SNG, or LNG purchase arrangements.

Reservoir: A porous and permeable underground formation containing an individual and separate accumulation of producible hydrocarbons (oil and/or gas) that is confined by impermeable rock or water barriers and characterized by a single natural pressure system. In most situations, reservoirs are classified as oil reservoirs or gas reservoirs by a regulatory agency. In the absence of regulatory authority classification, the classification is based on the natural occurrence of the hydrocarbons in the reservoir, and classification and names may be determined by the respondent.

Revisions: Any change in earlier reserve estimates, positive or negative, made during the report year as a result of new information, including the enlargement of the proved area (extensions). Revisions for a given report year also include increases associated with improved recovery techniques or equipment, adjustments made for previous errors in production estimates, or changes in one or more facts in volumetric or performance reserve estimates.

Revisions and Additions (Gross Change in Reserves): The difference (plus or minus) between the year-end reserves plus production for a given year and the year-end reserves for the previous year.

Salable-Natural Gas: Natural gas marketed under controlled quality conditions.

Short-Term Sales: Any short-term purchase covering a time period of 2 years or less. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are classified as short-term sales, regardless of the stated contract term.

Supplemental Gaseous Fuel Supplies: As used in this report supplemental supplies include coal gas, LNG, SNG, and any other supply not explicitly type-identified in the Form 15 filings.

Supply Source: May be a single completion, a single well, a single field with one or more reservoirs, several fields under a single gas purchase contract, miscellaneous fields, a processing plant, or a field area, providing, however, that the geographic area encompassed by a single supply source may not be larger than the State in which the reserves are reported.

Synthetic Natural Gas (SNG): A product resulting from the manufacture, conversion, or reformation of petroleum hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

Underground Storage: Any underground facility where natural gas is stored within the confines of naturally occurring earth formations and where natural gas is injected with the intent of future withdrawal and use. Abandoned mines or caverns in salt domes in which natural gas is stored underground are considered to be underground storage facilities.

Undifferentiated/Unspecified Reserves and Production: Reserves and production that are not separable by FERC production areas or by States. Undifferentiated and unspecified reserves consist only of company-owned gas in underground storage commencing with report year 1981.

Warranty Contracts: Gas purchase agreements for the sale of natural gas by a producer to a pipeline company wherein the producer warrants it will have available sufficient gas supplies to meet its commitments over the life of the contract. Generally, the producer does not dedicate gas reserves underlying any specific acreage, lease, or fields to the agreement. Substitution of various sources of gas supply may be permitted according to the terms of the contract.

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